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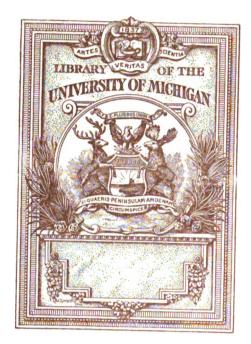
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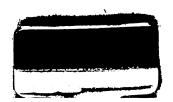
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BULLETIN

OF THE

HARVARD MEDICAL SCHOOL ASSOCIATION

NUMBER 1

Report of the First Annual Meeting held in Boston June 23, 1891



Boston: Published by the Association

1891

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CONTENTS.

	,	PAGI
OFFICERS OF THE HARVARD MEDICAL SCHOOL ASSOCIATION		5
Constitution		ç
REPORT OF THE FIRST ANNUAL BUSINESS MEETING		
ACCOUNT OF THE FIRST ANNUAL DINNER		21

OFFICERS

OF THE

HARVARD MEDICAL SCHOOL ASSOCIATION.

President.

1871. JAMES READ CHADWICK, 270 Clarendon St., Boston, Mass.

Vice-Presidents.

- 1878. CHARLES PARKER BANCROFT, Concord, N.H.
- 1856. CHARLES EDWARD BRIGGS, . 2747 Olive St., St. Louis, Mo.
- 1861. ROBERT THAXTER EDES, . . Adams Nervine Asylum, Jamaica Plain.
- 1860. JAMES MILTON FLINT, . . . Navy Dep't, Washington, D.C.
- 1869. WILLIAM ABRAHAM HASKELL, Alton, Ill.
- 1865. Amos Howe Johnson, . . . 26 Winter St., Salem, Mass.
- 1867. FREDERICK RUSSELL STURGIS, 16 W. 32d St., New York City.
- 1868. VERNON OTIS TAYLOR, . . . Box 1459, Providence, R.I.
- 1868. JOHN ORDWAY WEBSTER, . . 59 State St., Augusta, Me.
- 1865. GEORGE HERMAN POWERS, . 215 Geary St., San Francisco, Cal.

Treasurer.

1875. WALTER ELA, 62 Brattle St., Cambridge, Mass.

Secretary.

1885. ROBERT WILLIAMSON LOVETT, 379 Boylston St., Boston, Mass.

Councillors.

FOR THE TERM OF FOUR YEARS.

- 1870. CHARLES FOLLEN FOLSOM, . 15 Marlboro St., Boston, Mass.
- 1863. GEORGE EBENEZER FRANCIS, . 79 Elm St., Worcester, Mass.
- 1854. LINCOLN RIPLEY STONE, . . Newton, Mass.

6 HARVARD MEDICAL SCHOOL ASSOCIATION.

FOR THE TERM OF THREE YEARS.

1874.	WILLIAM	STURGIS	BIGELOW, .	_		60 Beacon	St.	Boston.	Mass.
10/4.	WILLIAM	GIURGIS	DIGELOW, .	•	•	oo beacon	0		

- 1865. SILAS DEAN PRESBREY, Taunton, Mass.
- 1864. FRANCIS MINOT WELD, Storey Pl., Jamaica Plain, Mass.

FOR THE TERM OF TWO YEARS.

- 1859. JOHN TAYLOR GILMAN NICHOLS, . 63 Brattle St., Cambridge, Mass.
- 1865. EDWARD WIGGLESWORTH, 188 Beacon St., Boston, Mass.
- 1883. ALFRED WORCESTER, 742 Main St., Waltham, Mass.

FOR THE TERM OF ONE YEAR.

- 1861. FRANCIS HENRY BROWN, 75 Westland Ave., Boston, Mass.
- 1867. CHARLES GREENLEAF CARLETON, . 301 Essex St., Lawrence, Mass.
- 1859. CHARLES CARROLL TOWER, . . . Weymouth, Mass.

CONSTITUTION

CONSTITUTION OF THE HARVARD MEDICAL SCHOOL ASSOCIATION.

ARTICLE I.

The name of this Association shall be the "Harvard Medical School Association."

ARTICLE II.

The objects of this Association shall be to advance the cause of medical education, to promote the interests and increase the usefulness of the Harvard Medical School, and to promote acquaintance and good-fellowship among the members of the Association.

ARTICLE III.

SECTION 1. All graduates of the Harvard Medical School are eligible to be and may become members, if approved by the Council.

SECT. 2. By recommendation of the Council and by a two-thirds vote of the Society at any regular meeting, any member may be dropped.

SECT. 3. Every member shall pay an initiation fee of one dollar, and an annual due thereafter of one dollar; but any member may become a life member by the payment of twenty dollars in one payment, after which he shall be relieved from the payment of all dues.

SECT. 4. All physicians who have received any honorary degree from Harvard University shall be *ipso facto* honorary members of the Association. Honorary members may also be elected by this Association on nomination by the Council.

ARTICLE IV.

The officers of the Association shall be a President, ten Vice-Presidents, a Secretary, a Treasurer, and a Council of fifteen



members. The President, Secretary, and Treasurer shall be exofficio members of the Council.

ARTICLE V.

SECTION 1. The President, Vice-Presidents, Secretary, and Treasurer shall be elected for the term of three years.

SECT. 2. The members of the Council, not members ex officio, shall be elected in classes as follows: at the first meeting of the Association, three members of the Council shall be elected for the term of four years, three members for the term of three years, three members for the term of one year; and thereafter, at the annual meeting of the Association in each year, three members shall be elected for the full term of four years, to fill the places of those whose term of office shall then have expired.

SECT. 3. Vacancies occurring in any of the offices before the expiration of the respective terms shall be filled at the annual meeting next following the occurrence of such vacancies. The Council shall have the power to fill a vacancy in the offices of Secretary or Treasurer for the remainder of the current year.

SECT. 4. All officers of the Association shall hold their respective offices during the regular term thereof, and until their successors shall be elected and qualified.

ARTICLE VI.

The annual meeting of the Association shall be held at Boston, Massachusetts, on the Tuesday preceding the annual Commencement of Harvard College; provided, however, that the Council shall have the power to appoint in any year a different time and place for the annual meeting, if deemed expedient.

ARTICLE VII.

The President or the Council shall have the power to call a special meeting of the Association at any time, provided that at least two weeks' previous notice be given to all members of the Association.



ARTICLE VIII.

SECTION 1. The executive power of the Association shall be vested in the Council, subject to the control and direction of the Association.

SECT. 2. The Council shall have the power to elect from its own members an Executive Committee of not less than three members, to whom may be delegated such powers as the Council shall deem expedient.

SECT. 3. The Council shall elect every year from its own members a "Committee on the Harvard Medical School," and may elect such other committees from its own members or the Association at large as it shall, from time to time, deem expedient to carry out the objects of the Association.

SECT. 4. The Council shall have the power to appoint, from time to time, one or more Corresponding Secretaries in the different cities or towns of the United States and the British North American provinces. It shall be the duty and office of such Corresponding Secretaries to promote in their respective localities the objects and interests of the Association.

SECT. 5. The Council shall have the power to fix the number of members of the Association necessary to constitute a quorum for the transaction of any and all business save that of amending the Constitution, and to fix also the number of their own members necessary to constitute a quorum of the Council.

ARTICLE IX.

The Secretary, Treasurer, the Council, and the Committee on the Harvard Medical School shall make and submit to the Association, at its annual meeting in each year, reports in writing or print of their respective doings for the preceding year.

ARTICLE X.

This Constitution may be amended by a majority vote of all the members of the Association present at the annual meeting, or at any special meeting called for that purpose, notice of such amendment having been given in the call for the meeting.

ANNUAL MEETING

ANNUAL MEETING.

The annual meeting of the Harvard Medical School Association was held at the Harvard Medical School, Boston, on Tuesday, June 23, 1891, at 12 o'clock, the President in the chair. There were present 112 members. The Secretary pro tempore read abstracts of the records, giving an account of the meeting of organization, of the meetings of the Council, and of the Executive Committee, as follows:—

A meeting was held at the Boston Medical Library Association Nov. 26, 1890, of gentlemen interested in the formation of an Alumni Association of the Harvard Medical School. It was in response to a call from Dr. J. R. Chadwick, of Boston. Dr. A. H. Johnson, of Salem, was elected temporary chairman, and Dr. R. W. Lovett, of Boston, temporary secretary.

It was unanimously voted to form an Association of Alumni of the Harvard Medical School. This was decided upon, and after a careful discussion of the various aspects of the question, a Committee on Organization was appointed, consisting of Dr. J. R. Chadwick of Boston, Dr. F. H. Brown of Boston, Dr. H. P. Bowditch of Boston, Dr. G. E. Francis of Worcester, and Dr. L. R. Stone of Newton.

The meeting to hear the report of the Committee on Organization, and to organize the Association, was held on April 30, 1891. Dr. J. R. Chadwick was elected temporary chairman, and Dr. R. W. Lovett temporary secretary. The report of the Committee on Organization was accepted, and the Constitution as presented by them was adopted with slight modifications. The Chair appointed Dr. R. H. Fitz of Boston, Dr. J. A. Jeffries of Boston, Dr. Homer

Gage of Worcester, Dr. C. E. Vaughn of Cambridge, and Dr. F. A. Sawyer of Wrentham as a Committee on Nominations. The present Officers and Councillors were unanimously elected.

The first meeting of the Councillors was held at the Boston Medical Library May 7, 1891. There were present the Chairman, Treasurer, Secretary, and nine Councillors. It was unanimously voted that a quorum of the Council should consist of eight members, and a quorum of the Association should consist of fifteen members. An Executive Committee was elected, to consist of the President, Treasurer, Secretary, and Drs. Weld and Folsom.

At a meeting of the Executive Committee of the Council, held May 15, 1891, the Chair appointed, as a committee to report on the Medical School, Dr. J. T. G. Nichols of Cambridge, Dr. Alfred Worcester of Waltham, and Dr. L. R. Stone of Newton. A list of the graduates of the Harvard Medical School was approved, and the annual dinner of the Association was appointed for June 23, 1891.

A second meeting of the Councillors was held June 19, 1891, with the President in the chair. Seven Councillors and the Secretary pro tempore were present. Nominations for honorary membership were made, and it was voted to recommend to the Association that it should petition the Overseers of the University for the right of suffrage in the election of Overseers.

The Treasurer read the following report, which was referred to an Auditing Committee of Dr. J. S. Greene and Dr. E. M. Buckingham, who were appointed by the Chair:—

HARVARD MEDICAL SCHOOL ASSOCIATION, IN ACCOUNT WITH WALTER ELA, Treasurer.

	June. T	May. T	1891.
	June. To amount received from 1st to 20th. Initiation fees, 157.00 Annual dues,	May. To amount received during the month. Initiation fees,	Receipts.
\$1,182.00	0 774.00	\$808.00	
*Amount on hand to balance, .	By stationery bills, Vouchers 4, 5, 11,	3, 6, 7, 9, 12, 14,	Expenditures.
<u> </u>	11.90 25.20	\$67.00 119.99	
957.91 \$1,182.00	\$224.09		

(Signed)

WALTER ELA, Treasurer.

* Deposited to the credit of the Association in Cambridge Savings Bank, book No. 28, 170, drawing interest at 4 per cent.

The committee appointed to audit the accounts of the Treasurer of the Harvard Medical School Association have carefully attended to that duty, and respectfully report that they find the accounts correctly cast and properly vouched.

The balance on hand is nine hundred and fifty-seven dollars and ninety-one cents (\$957.91), and is deposited in the Cambridge Savings Bank.

James S. Greene,
Edward M. Buckingham,
Committee.

Boston, June 26, 1891.

The following honorary members were unanimously elected: R. T. Davis, M.D., of Fall River; D. H. Storer, M.D.,* of Boston; Professor G. L. Goodale, M.D., of Cambridge; H. I. Bowditch, M.D., of Boston; G. C. Shattuck, M.D., of Boston; † H. P. Walcott, M.D., of Cambridge; B. E. Cotting, M.D., of Roxbury, and † G. H. Lyman, M.D.,‡ of Boston.

The following motion, recommended by the Council, was unanimously carried at the meeting of the Association:—

To the Board of Overseers of Harvard University:

Voted, That this Association, consisting of graduates of the Harvard Medical School, do hereby petition your honorable body that the right of suffrage in the election for Overseers be extended to the graduates of all the professional schools of the University.

The Chair reappointed Dr. Nichols, Dr. Worcester, and Dr. Stone as a committee, to make a further report on the Harvard Medical School.

* Died in Boston, August, 1891.

† Not graduates of the Harvard Medical School. ‡ Died in London, Eng., Aug. 19, 1891.

ANNUAL DINNER

ANNUAL DINNER.

After the adjournment of the annual meeting the members of the Association assembled for dinner at the Hotel Vendome. There were present one hundred and ninety-four members and two invited guests. At the close of the dinner the meeting was addressed by the President, as follows:—

DR. CHADWICK'S REMARKS.

Fellow-Alumni of the Harvard Medical School,—
The movement which has resulted in the formation of this Association did not have its origin in the minds of a few restless spirits, as you might hastily infer from the names appended to the call for the meeting of organization; but we were incited to the step by a wide-spread and ever-growing sentiment among the Alumni that we can be of more use to our School in its efforts to raise the standard of medical education, when banded together as an organization, than we can by our individual exertions. At the outset, we tender to the Faculty of the School and to the governing bodies of the University our recognition of their high aims, of their many sacri-

fices, and of the pre-eminent success which they have finally achieved.

Without straining our vision to discern the small nucleus of three professors with which the School started one hundred and eight years ago, their poverty of equipment and necessarily meagre instruction, the contrast, between what most of us here present can remember during our student days and the present status, is sufficiently striking to impress our imaginations and enlist our enthusiastic support. I will not anticipate the report on the condition of the Medical School which your committee will soon make to you, but will merely designate a few of the changes which have tended to raise the School to its present state of efficiency: the establishment of an admission examination; the increase of the required period of study in each year of the course, so that it amounts to nearly nine months,—a longer time than that of any other school in the country; the institution of examinations at the end of each year's specified studies, which the student must pass before he can enter the next year's curriculum; the creation of a voluntary fourth year of instruction, and a series of courses for graduates through the entire year. Finally, we have the announcement by vote of the Faculty on May 16, 1891, that a four years' course of study will be required of every student entering on and after September, 1892. This step the Faculty are emboldened to take with a paltry guarantee fund of \$40,000

collected a few years since, although the Medical Faculty of the University of Pennsylvania require a permanent endowment fund of \$250,000, and a guarantee fund of \$20,000 per annum for five years, as an inducement to that School to adopt a four years' graded course. It behooves us to see that this confidence of our Faculty in the moral and material support of its Alumni and the liberality of this community is not misplaced. It is our bounden duty, as graduates of the Harvard Medical School, to convince the friends of medical education that our School must be aided to carry through this new measure of scholastic advancement.

Our School is fortunate in being one department of a University, and that the oldest and the best equipped one in the country. Our country is suffering from the multiplicity of independent medical schools, established in many instances from no high motive, conducted for the purpose of making money or promoting the personal aggrandizement of its pro-The result is degrading to medical education, and inflicts upon the community a horde of ignorant practitioners. The connection with a university insures a higher grade of instruction, a greater devotion to the scientific side of medicine in the teaching, a stimulus to original research, economy in the establishment of museums and laboratories, and finally a diploma which borrows lustre and value from the renown of the University.

24 HARVARD MEDICAL SCHOOL ASSOCIATION.

The connection with a university, however, may have some disadvantages, arising from peculiarities of organization, in which some parts of the whole body may fail to secure an equal share in the government or just consideration in the development of the successive courses of study.

The Faculty of your Medical School, in common with those of the other professional schools in the University now, need our support in their appeal to the Overseers, in behalf of their graduates, for the privilege of voting for members of that body, and thus securing representation in the government. This right is felt to be essential to insure a full consideration of the needs of the professional schools in the development of the university system of education as a whole. You know that the collegiate department has become to a certain extent the feeder of the professional schools, yet its course of instruction and requirements have been made more and more rigorous, and thus the age at which men graduate greater and greater. The result now is that men pursuing the double course, as it is best they should do, are twenty-six years old on the average when they receive their diploma of M.D. They are at least two years older than their brethren in other countries, and are to that extent handicapped in the This serious detriment to the Medical arena of life. School will be still further enhanced when the four years' course is established. To obviate this, the Faculty of the Medical School has appealed to the governing boards of the University either to lower the standard of the college curriculum, so that students may take their A.B.'s at an earlier age, or to permit the first year of the professional school to be accepted as an equivalent for the last year in the college, thus shortening the college course by one year to all who enter the professional schools. Neither of these two concessions has been made to the professional schools, although repeatedly demanded. I learn, however, that at a recent meeting of the Board of Overseers a favorable report on the suffrage question has been made by the committee to which the appeal was referred.

In the discussions which have arisen from this conflict it has been assumed that the development of Harvard University as primarily a school of arts and secondarily a university by the addition of specialized Schools of Law, Medicine, Dental Medicine, and Veterinary Medicine, is exceptional in the history of educational institutions. This is a mistake. When we go back to the origin of universities, what do we find? That the earliest universities in Europe, as here, may all be traced to the social wants of the communities in which they had their source. The earliest institution which deserves the name of university originated in the Medical School of Salernum, to meet the needs of the human body. The second university emanated from the School of Law of Bologna,

established to meet the needs of men in their relations to each other in the social organism. The third originated in the School of Arts of Paris with a distinct theological purpose, to satisfy the wants of the human spirit in its relations to the unseen.

What interests us most, the School of Salernum, is said to have begun by instruction given by the monks of the Benedictine monastery, who also gave advice and medicines gratuitously. As early as 1065 A.D. the School was so famous as to attract students from Italy, France, Germany, and Spain. The celebrated "Rules of Health," addressed to the King of England, bears the date of 1100 A.D. Salernum was a School of Arts as well as a Medical School, the full curriculum consisting of a three years' course in arts as preliminary to a five years' course in medicine. In 1224 A.D. Frederic, emperor of the Romans, founded the University of Naples, embracing the studies of the three Faculties in addition to the preliminary course in arts, and incorporated in it as one department the School of Medicine of Salernum, located only thirty miles distant.

Early in the twelfth century Irnerius, a teacher in the School of Arts in Bologna, founded the School of Law as a specialized department of study. In the beginning of the thirteenth century there were 10,000 students. At the time of Roger Bacon, near the middle of the century, there were 20,000 students. So large a number of students had to combine for

mutual help: hence arose the "Nations," subsequently so famous in the development of this and other universities. They originally consisted of the Italian, French, Picard, and English nations, constituting selfgoverning societies in the University. They included the students and those who had taken the masters' degrees in the several departments. They passed their own laws, elected their own rectors, through whom they had a voice in the government of the University. Their influence corresponded approximately to that of the Alumni of the present day except that they were drawn, as we think to-day they should be drawn, from all the departments of the University. latter half of the fourteenth century Bologna was fully developed with two juristical Faculties,—one of arts and medicine combined, and one of theology.

The University of Paris—the third, chronologically speaking—was developed directly from the School of Notre Dame at the end of the eleventh century, by the successive labors of Philip of Champeaux, Anselm, and Abelard. From the nucleus of the masters of arts and of theology it was raised into a university by Louis VII. in 1440. The Medical School was instituted about 1200 A.D. Each of the four nations had its hall, in which the students received instruction. The masters and students of each nation elected a procurator, who then elected a rector. These five constituted the governing body, so far as discipline, protection, defence of privileges, were

concerned. The consortorium magistrorum, or body of teachers, regulated the studies and degrees. In 1274 A.D. the Rector of the Nations became Rector of the School of Arts, and in 1341 became the Rector of the whole University.

The consortorium magistrorum, consisting practically of the teachers, finally broke up into Faculties, each of which regulated its own department of studies. We finally find the University of Paris composed of

- 1. The Faculty of Theology.
- 2. The Faculty of Law.
- 3. The Faculty of Medicine.
- 4. The Nation of France.
- 5. The Nation of Picardy.
- 6. The Nation of Normandy.
- 7. The Nation of Germany, formerly of England.

The four nations had each its chief, who was changed yearly. Together they formed the Faculty of Arts, but still constituted four distinct bodies, each of which had its vote in the affairs of the University. The Rector, chosen by their representatives from the Faculty of Arts, was chief of the whole University.

From the general administration of the University the higher Faculties, as such, were originally excluded; but they resented this, and erelong they received a governing position for their Deans, side by side with the Rector and the procurators of the nations.

This is precisely the contest which we are waging

in Harvard University in the nineteenth century. The graduates of the College of Arts have succeeded by inheritance to the exclusive right to elect the Board of Overseers, while the graduates of all the other Faculties now claim an equal right of representation in the government of the University. It is to be hoped that our Board of Overseers will profit by the lessons of history, and not make us wait two or three centuries, as did the rulers of the early universities, before granting our demands.

In conclusion, I may offer as our motto a phrase from the Talmud which Dr. Billings has more than once quoted in his addresses: "The time is short, the work is great, the reward is also great, and the master presses. It is not incumbent upon thee to complete the work, but thou must not therefore cease from it."

Letters were then read, as follows: —

Dear Dr. Chadwick,—Allow me to express to you and to the meeting at which you preside my congratulations on the formation of the Association of the Medical Alumni of Harvard University. The benefits of such an association have been experienced and demonstrated by many medical colleges. Medical education is one of the most important matters before our community, by which the prolongation of life and the alleviation of pain and discomfort are to be provided for.

It is strange that in the State of Massachusetts such opposition and such difficulty are experienced in inducing the legislature of the State to recognize the value of proper training of those ministering to the sick and suffering, and in distinguishing them from ignorant pretenders. We must acknowledge how much has been done for medical education in this community, and in this we find a stimulus for renewed and increased effort.

Looking back upon a somewhat long life and recognizing the disabilities of sickness and old age, I can warmly congratulate you all on the steps you are taking, and the increased opportunities which are before you, and express a wish that your efforts may be successful in behalf of the Medical School, which has done so much for medical education and training. It is a great delight to recognize what strong hands and earnest purposes are embarked in this cause. May success crown your efforts, and our Medical School be strengthened in a new career of usefulness and prosperity!

With best wishes, very truly yours,

GEO. C. SHATTUCK.

Dear Doctor,— Sickness and painful events in my family have prevented me from making an earlier reply to your letter informing me the Harvard Medical School Association had chosen me as one of its honorary members. For this mark of confidence and respect I return my sincere thanks, and I accept with gratitude the honor thus conferred upon me.

I remain, yours sincerely,

HENRY I. BOWDITCH.

My dear Doctor,—I am highly gratified by the formation of the Harvard Medical School Association. It will undoubtedly be of invaluable aid to the Medical School. I most heartily wish it success. Faithfully yours,

D. HUMPHREYS STORER.

BEVERLY FARMS, MASS., June 19, 1891.

Dear Dr. Chadwick,— I regret that I shall not be able to attend the meeting of the Medical School Association on the 23d of this month.

I send my heartiest greetings to the Association. I know the members would receive me kindly as a relic of the past, not without a certain value as a fragment of antiquity. I have long been the sole survivor of that primeval Faculty of which I became a member in 1847. In that point of view, I am not merely a rarity, I am a unique specimen, and have an adventitious market price, like one of those rare cents for which collectors pay a premium.

Halfworn-out old copper as it is, its scarcity makes it worth a dime or, perhaps, a dollar.

In the days to which I refer, the Faculty could say of itself, in the words of Wordsworth's little girl,—

"We are seven."

John Ware, cautious, conscientious, thoughtful, quiet, judicious; Jacob Bigelow, sagacious, independent, with grave aspect, and an inner consciousness full of fun and satire,—a man of many accomplishments, but, above all, of sound sense and practical wisdom; Walter Channing, sanguine, enthusiastic, hospitable to new ideas of all sorts, with something of the literary tastes and tendencies belonging to the family of which he was a member; George Hayward, eminently social, and a very agreeable companion, old-fashioned in various ways,—he always made a "pint" of saying "jint" for "joint,"—eminent as a surgeon, but rather too nervous for a model operator. Of the three others, one name must be passed over in silence: it is too well remembered without being spoken. The two others of the seven were Dr. John Barnard Swett Jackson and myself, who became members of the Faculty in that same year, 1847.

Of Dr. John Jackson it is impossible to speak without an affectionate tribute to his pure, transparent, truthful nature, joined with a love for the most unlovely department of anthropology, the study of diseased and degenerated human organs,— a love like that of an artist for his more alluring pursuit. The monuments of his industry are to be seen and studied in our museums. So long as he lived the citizen of Boston could say truly, if there was anything interesting in his fatal illness, "Non omnis moriar"; for some portion of his bodily frame was sure to be saved from decay and skilfully prepared and arranged by our expert colleague to survive in alcoholic immortality.

Two years after I became a member of the Faculty the name of Henry Jacob Bigelow was added to the list of its members. His eulogy has so lately been spoken that I will not repeat the language with which his ablest contemporaries have done honor to his memory, nor say over what I myself have placed upon record elsewhere. I will only add here that, strenuous as he was in any labor which interested him, he was most vivacious and entertaining in the intervals of business, playful, often, as the young kitten of a lioness.

During a large part of my period of service as Professor I enjoyed the companionship of Dr. David Humphreys Storer, the only other survivor besides myself of the ancient primeval Faculty. Ardent, impulsive, indefatigable in the branch of the profession to which he specially devoted himself, Dr. Storer was pre-eminently the friend of the medical student. There was nothing he would not do to serve a pupil; and I trust that he will be remembered by the Alumni of the School, at this their first meeting, in accents which will reach him in his chamber of age and infirmity.

I have grown prolix with my recollections, and I will close at once by wishing long life and all prosperity to the Association of the Alumni of the Medical School of Harvard University.

Very truly yours,

O. W. HOLMES.

The report of the Committee on the Harvard Medical School was read by the Chairman, Dr. J. T. G. Nichols, of Cambridge, as follows:—

HARVARD MEDICAL SCHOOL ASSOCIATION.

REPORT OF THE COMMITTEE ON THE HARVARD MEDICAL SCHOOL.

JUNE 23, 1891.

The Committee on the Harvard Medical School must, in advance, ask your indulgence for what may seem a very inadequate statement of its condition. They were appointed only four weeks ago, and have had no time to examine the work of the School in any of its branches.

They think no report at this time could be better than to compare the School of the present time with that of a quarter of a century ago.

Then the School was on North Grove Street, the building inconvenient and in many respects incomplete.

The Faculty consisted of ten professors, an adjunct professor, an assistant in chemistry, and a demonstrator of anatomy. The course of instruction extended only through the winter months, and mainly consisted of didactic lectures. The only method of

ascertaining the progress of a student was the "quiz," occupying a few minutes at the commencement of the lecture, addressed only to those who signified their wish to take part in this exercise.

As compared with the present time, the clinical opportunities were very inadequate. The hospital visit was a wild rush of all the students, crowding around the bed as closely as possible, those in the front rank being able sometimes to see or perhaps hear the physical signs of disease, while those in the rear had to be satisfied with a glance at the patient's face or form. In the surgical amphitheatre the student looked from a distance upon the subject of the operation, admired the skill of the surgeon, but could carry away with him but little practical knowledge of surgical manipulation. After two courses of lectures and three years of private instruction the student came to the examination for a degree. An oral examination of ten minutes in each branch, with the preparation of a thesis on some subject connected with medical science, determined his fitness for the practice of medicine.

This picture of the School in the olden time will be recognized by our older members. Poor as it is, it has its bright spots. The teachers were able and earnest men; and to those students who diligently sought them opportunities for study were offered not far inferior to those of the present day, when compared with the state of medical science at that time. The Clinical Conference was already in existence. Even then our School stood in the front rank of similar institutions in the country.

You have just visited the large and well-arranged building which is the present home of our School, with laboratories for anatomical, physiological, histological, pathological, and chemical work. By the generosity of one of the younger graduates, a new laboratory for bacteriological and pathological investigation, well equipped in every respect for this important work, has just been completed.

In 1872 the School radically changed its course of instruction from the old system of didactic lectures to a graded course, extending throughout the academic year, of three years' duration, in which the teacher comes into individual relations to the student, and of which laboratory and clinical work comprise a large and important part. A four years' course was at the same time provided for those who chose to pursue it. At the time this was looked upon by many as a doubtful experiment and a somewhat

hazardous one for a school whose teachers mainly depended upon tuition fees for their salaries.

In the face of opposition and doubt, the Faculty has steadily pursued its course with such ability and devotion that success has come in full measure. We extend to the men who have accomplished this great work our meed of praise, and assure them of our loyal support in their efforts to make our School the best one in the land.

In contrast with the picture of the old School, let us draw one of the present day. The Faculty now consists of twenty-three professors and assistant professors, a curator of the anatomical museum, a demonstrator of anatomy, thirty-six instructors and assistants, and ten special clinical instructors.

The clinical opportunities have vastly increased during the past twenty-five years, as will be seen by the list of hospitals that are open to the students of the School: the Massachusetts General Hospital, City Hospital, Carney Hospital, Children's Hospital, the Lying-in Hospital, which has been lately much enlarged, the Free Hospital for Women, the Eye and Ear Infirmary, the Boston Dispensary, the Chelsea Hospital, and several private hospitals. Daily instruction is given by lectures, recitations, and practical work in the laboratory, dissecting-room, and by the bedside in the hospitals. Clinical conferences, both in medicine and surgery, are held, in which a student reports a case assigned to him for study, which is criticised by the teacher and his fellow-students. Much attention is paid to this practical work, that the student may acquire the power to do things, so much more important, as the President of the University lately said, than the mere memorizing of facts or even principles. The student is carefully taught the various methods of physical exploration, and has ample opportunity to become practically acquainted with them.

In the surgical department, in addition to lectures and recitations and clinical conferences, practical instruction is given in bandaging, the use of surgical apparatus, and in operative surgery by means of the *cadaver*. The students of the second class are allowed, in small sections, to assist as dressers in the surgical outpatient rooms of the Massachusetts General Hospital for a period of four weeks.

The instruction in Obstetrics, Diseases of Women and Children, has perhaps been more improved than any other. In the

olden time Obstetrics was taught wholly by lectures, the last two subjects being hardly recognized. A student might, and often did, enter upon practice without having seen a case of labor.

Instruction is still given by lectures and recitations, but clinical opportunities are also provided. The Boston Lying-in Hospital, with its out-patient department, furnishes ample material for this work. Last year one thousand and thirty-nine women were delivered under its care,—five hundred and nine in the hospital, five hundred and thirty as out-patients. One of the requirements of the examination in Obstetrics is that the student shall have taken charge of and report upon six cases of labor.

In Diseases of Women and Children the instruction is of the same complete and practical character. In Diseases of Women, besides lectures and recitations, practical instruction is given in the methods of physical examination, a course of operative gynæcology at the Free Hospital for Women, clinical conferences, and a course of operative gynæcology upon the cadaver in which the student performs the ordinary operations with his own hands.

Instruction upon Diseases of Children begins in the last half of the second year, and comprises lectures upon infant feeding, the development of the healthy infant and child, followed by the study of the diseased conditions and the direct examination of cases. The opportunities for studying these diseases are large, offered by the Boston Dispensary, the Children's Hospital, and the City Hospital. In the last-named institution the special wards for Scarlet Fever and Diphtheria offer unusual opportunities for the study of these diseases.

Other departments of instruction are Ophthalmology, including the use of the ophthalmoscope, Dermatology, Syphilis, Otology, Laryngology, Diseases of the Nervous System, Embryology, Histology, Bacteriology, Hygiene, and Legal Medicine. To all these departments the description of those we have selected as illustrations will equally apply. They complete a list of instruction which in its extent and character is not equalled in this country.

In addition to all this, a summer course has been established, including Clinical Medicine, Physical Diagnosis, Diseases of the Nervous System, Diseases of Children, Clinical and Operative Surgery, Obstetrics, Gynæcology, Diseases of the Eye and Ear, etc.

There are also post-graduate courses, offering the best advantages to those who wish to keep up with the progress of medical knowledge.

The requirements for a degree are that the candidate shall have passed all the examinations of the course. How strict these examinations are may be seen by the papers which are published from time to time. To the older graduate these papers must give rise to mingled feelings of self-congratulation that he got his degree so easily, and of regret that he missed the training which might have enabled him to undergo so searching an ordeal. To all they are evidence of the thoroughness of the course of instruction and of the training that the successful candidate has been through.

Still pressing on towards better things, the Faculty announces that, after the next year, a four years' course will be required as the condition of the degree of Doctor of Medicine from Harvard University. Although the success of the three years' course will silence many of the old doubts, still it is a step not without its difficulties and perhaps risks. That it will be successful we feel assured. It is our duty, as it will be our pleasure, to do all in our power to strengthen the hands of the Faculty in this new effort to elevate the standard of medical education and to compel the recognition of the American degree throughout the civilized world.

J. T. G. NICHOLS, LINCOLN R. STONE, ALFRED WORCESTER, Committee.

The toasts were as follows:—

THE CORPORATION OF HARVARD UNIVERSITY.

The President: Gentlemen, it is gratifying to the pride of medical graduates to recall the fact that two of their number, Dr. Charles Chauncy and Dr. Leonard, have occupied the chair of President of the college; yet this position did not at that time call for anything like the attainments which is implied by the recent promotion of one of our number from the Board of Overseers to be a member of the Corporation. In the unavoidable absence of President Eliot, I call upon Dr. H. P. Walcott, a graduate of the Dartmouth Medical School, who has to-day been elected an honorary member of this Association.

REMARKS OF DR. H. P. WOLCOTT.

Mr. President and Members of the Harvard Medical School Association,— It is a great pleasure to me to be the mouth-piece here of one of the governing bodies of the University, for the purpose of congratulating you upon the success that has attended the formation of this Society. Its promises of usefulness are not limited to this School or to Harvard College alone, but are offered for the advancement of the cause of medical education. We may then believe that this meeting will mark the happy beginning of an interest actively devoted to the task of placing medical instruction in Boston on a level with that given anywhere in the world.

It seems to me a by no means discouraging feature in the discussions which have been carried on during the past two years as to the standards of education in the various departments of Harvard College that there should be so much criticism and so much comparison of our methods and advantages with those of some other American colleges, and also with those of similar institutions on the other side of the Atlantic. So long as this spirit of criticism is coincident with an actual advance, it only indicates a more or less accurate appreciation of what can be done, together with a determination that something shall be done. What has been done a glance at the history of the Harvard Medical School shows.

In 1782 the Corporation of the college voted to establish certain medical professorships, and, with characteristic prudence, also voted that professors should be appointed to these chairs, when ways and means could be devised for raising sufficient sums for their encouragement. They proceeded, however, to define the duties and responsibilities of these professorships, and concluded by declaring the expediency of electing men of public spirit and distinguished abilities, who would undertake the business for the sake of the fees to be obtained from those in attendance upon the lectures. Upon this apparently uncertain ground was laid the foundation of the first structure which was superadded to Harvard College, and opened the way for the University.

In 1782 Dr. John Warren and Dr. Benjamin Waterhouse were chosen professors of surgery and medicine respectively. A year later Dr. Aaron Dexter was elected professor of chemistry and materia medica, thus completing the organization of the School in this form, which for many years it retained.

Dr. Ezekiel Hersey, who died in 1770, had bequeathed to the college the sum of one thousand pounds, the interest only of the sum to be used for the support of a professor of anatomy and physic, and for that use only. The possession of this fund undoubtedly led to the establishment of the School; and it is significant that from that day to this the teaching of medicine in the University has been almost

exclusively indebted to the medical profession for its most considerable endowments.

The new School was regarded with some jealousy at the outset by the Massachusetts Medical Society, incorporated in 1781. Ten Fellows of the Medical Society, at a meeting held in October, 1783, were called upon by their Council to consider "whether the doings of any of the literary societies in this Commonwealth interfere with the charter rights of the Medical Society."

Fortunately, no interference was discovered, and there has been no break in the friendly relations between the two organizations. It may be of profit, in the present discussion as to the rights of medicine to a place among the so-called liberal studies, to remember that so wise a body as the Massachusetts Medical Society held the education given by this School to be distinctly literary. In the college of 1782 there seemed to be no objection to certain purely medical studies in the undergraduate course, for the Senior Class attended Dr. Warren's lectures on anatomy. Another record from the books of the Corporation of the college in the year 1784 is suggestive of a question which has kept its importance for these hundred years and more. It is the statement that the attempt on the part of the Corporation to establish a public infirmary in Cambridge for the benefit of the School had failed.

In spite of all obstacles, however, the School has

gone on steadily improving. There has been no step backward. Its three instructors have been increased more than twenty-fold. Though one or two foundations in this country may at the present time be in possession of larger resources, happily these do not shut us out from a like good fortune, but may rather help us by the force of an example given to a community which has never been chary with its money in helping to improve education.

When we compare the facilities for carrying on courses of original research in this country with those offered by various institutions in foreign countries, we certainly suffer much in the comparison. tempted to believe that help should be sought where the foreign schools for special research often find the means to carry on their work; that is, by means of government aid. So far as our recent experience with government methods in the pursuit of the scientific questions of public medicine in this country can be trusted, I have, for myself, been somewhat reluctantly forced to the conclusion that not in the laboratories of Washington or any State capital, but in the privately endowed institutions of learning alone, are to be found the conditions for the best My impression is that scientific men in general are getting to have the same belief with regard to the departments in which they are respectively With one aspect of the very important interested. question that has occupied a good share of the time of the governing and teaching bodies of the University lately, the medical profession is much concerned; that is, the apparently too advanced age at which the college graduate presents himself for admission to the Medical School. .It appears that the average age of the graduate of Harvard College is twenty-three If we are not to confess that our vears and over. youth are of more sluggish intellects, or that our educational methods in the secondary schools cannot be improved, we must agree that improvement is possible. A careful examination of the work of the preparatory schools will, I think, satisfy any candid observer that a wholly unnecessary waste of time goes on there,—a waste of time for which the School itself is not entirely responsible,—and that a young man may be properly prepared for admission to college at eighteen years or less, without dangerous overpressure.

Certain courses of study which can be pursued in the summer months are to be hereafter available for the degree of A.B.; and advanced studies, presented at the entrance examination, may be now made use of in satisfying the requirements for this degree. By these means the time spent on the undergraduate courses has been effectively reduced for all those who have the desire, together with the capacity, for real work.

Much is said about the dangers that surround the life of a young man at Cambridge. I have lived for the best part of my life in the immediate vicinity of the college, and have seen much of the life of the students; and I know of no dangers there that do not also threaten young men in the community at large, and that are fully as serious for the student of nineteen years as for him who is two years younger. Moreover, it has never seemed to me just that the parent, who has persistently for seventeen years neglected the moral education of his son, should at that late day expect the college to repair his neglect.

Second toast: —

THE OVERSEERS OF HARVARD UNIVERSITY.

The President: Gentlemen, we have with us one of our number who was last year elected one of the Board of Overseers, not as an accredited representative of the Medical Alumni, but as one who received the suffrages of those of us who were entitled to vote as Alumni of the college, one to whom we can safely intrust the interests of the Medical School. Perhaps I cannot better describe him than by quoting the words of Blackwood's Magazine with reference to Dr. Benjamin Waterhouse, the first Professor of Medicine in our School,—"A man of great notoriety in Boston; an able physician; a good citizen; a pretty good writer, nevertheless." I call upon Dr. G. B. Shattuck.

REMARKS OF DR. G. B. SHATTUCK.

I have already learned in my moderate experience as a member of a board, euphemistically styled by the college the Honorable and Reverend Overseers, that one of our chief and important functions is to receive and consider, always with due respect and as often as possible with ready assent, communications from the Corporation. It is therefore easy for me to pursue these functions in your presence to-day, and to receive with respect and ready assent the excellent communication which my predecessor, the worthy representative of the Corporation, has just made to us. A more unusual and vertiginous privilege is that which has been here accorded me of sitting between a President and a Vice-President.

The relations of a medical school to a university is a question which commands here a sympathetic hearing. We are probably all very much of a mind. It is difficult to think of a university without schools. Neither do we conceive easily of a medical school pursuing the higher ideals of medical education in a liberal, scientific, intellectual spirit without university connections.

The best air of learning is to be found neither in the market-place nor in the forum, nor yet in the cloister.

Universities have kept alive the idea that the interests of life are not wholly material, that they are spiritual and intellectual as well; and we are glad that they have done so. On the other hand, a training which fits one simply to take pleasure in his own thoughts and musings and mental exercises is not the training which makes the man who can cope with the world as it lies about us to-day; and, in this respect, the training of one department of a university supplements that of another.

44 HARVARD MEDICAL SCHOOL ASSOCIATION.

You have formed this Association, I believe, to promote the interests of your Medical School, to support her in her strenuous efforts for the higher education, and to emphasize your desire that this School shall be, both in fact and in name, an integral, flourishing, and creditable part of the great University to which she belongs; and in such aims I wish you abundant success.

Third toast: -

THE MEDICAL SCHOOL OF HARVARD UNIVERSITY.

The President: Gentlemen, some years ago an eminent surgeon from one of the Southern States sent his son to be educated at the Harvard Medical School, and placed him under my supervision. He used to dine with me every Sunday evening, and talked much of his studies and teachers. I soon noted in his conversation a very suggestive difference in the way in which he quite unconsciously delineated the temperaments and methods of instruction of two of his teachers. Time and again he dilated upon the brilliancy and genius of one, his inventive faculty, his readiness of resource, and his operative skill and grace. Of the other he was constantly recalling and dilating upon the wonderful fact in nature, the correlation of physical and physiological forces that had been made clear and hammered into his receptive brain.

While we may all hesitate as to which of these professors should be recognized as the greatest man, none can doubt but what the man who can cause his pupils to remember the matter that he is inculcating is the greatest teacher. I hardly need add that the latter individual was Dr. H. P. Bowditch, Professor of Physiology, who as Dean of the Faculty will now be its mouth-piece.

RESPONSE OF H. P. BOWDITCH.

Among recent events in the history of our Alma Mater nothing is, I think, more significant and im-

portant than the sudden springing into existence of Alumni Associations of the various professional schools; for this banding together of those who have drawn their intellectual nourishment from a common source for purposes of mutual encouragement and good fellowship shows clearly how false and mistaken is the view that graduates of the academic department alone are to be depended upon to watch over the interests of Harvard as an institution of sound learning and liberal training. This view - natural, perhaps, though mistaken—found its most distinct expression in the remarks of a late distinguished member of the Board of Overseers, who was fond of maintaining that the college proper was the sole repository of liberal education, and that all the other departments were, as he expressed it, mere "breadand-butter departments"; i.e., places to which students resort to secure a means of livelihood. Now. it seems to me that, among the influences which bring us around this table to-day, the feeling that we have obtained from a common source a portion of the knowledge and skill which enable us to earn our bread and butter is a sentiment of very secondary importance. Were this the only bond between us, gentlemen, we should not be here to-day. What really binds us together is the feeling that we are members of the same great liberal profession, that we have common aspirations and ambitions to advance that profession to the highest attainable point, and that we owe our membership of that profession to our connection with that great institution of learning whose history and development have been so closely connected with that of our common country.

I regard therefore the mere fact that this Association has been formed, that seven hundred and fifty graduates of the Harvard Medical School have thus banded themselves together, and that we sit here round this table this afternoon as outward visible signs that the Medical School is hereafter to become an integral part of a great university. Much yet remains to be done before Harvard can take her proper position before the world as a university in fact as well as in name; but, when that time shall come, when we shall cease to deserve the reproach recently addressed to us, of "trying to crowd university methods into college forms too narrow for them," much of the credit of bringing about this result will, I am sure, be due to the efforts and the influence of the Harvard Medical School Association.

Fourth toast:—

THE PHYSICIAN AS LEGISLATOR.

The President: While medical men pass freely and frequently from the practice of their profession into the pursuit of science in its various fields, but few achieve higher political preferment than the State Legislature. It is, therefore, especially gratifying to have among us to-day one who, after serving for eleven years on the State Board of Health and contributing more than any other member by his sagacity to its success, was Representative of the first district in the House of Representatives at the national capital. I call upon Dr. Robert T. Davis, of Fall River.

REMARKS OF DR. ROBERT T. DAVIS.

Mr. President,— As it is a long time since I have been engaged in active medical practice, I am afraid that the few words I shall say in response to your kind introduction will be neither interesting nor instructive. I can only stand by the roadside and cheer the car of medical progress as it passes, loaded with the Medical Alumni of Harvard, and, turning to my fellow-spectators, say, All this we see, part of it I once was.

Let me at least congratulate you on the formation of this Association. In these days, when organizations are so numerous and spring from the slightest causes, none have a better right to exist than the Harvard Medical School Association.

Its purpose is of course to preserve the tradition and extend the usefulness of that famous School which we believe is not excelled in influence and importance by any other department of that ancient and renowned University,—the oldest and the first in eminence of all our learned institutions, whose history, almost coeval with that of our Commonwealth, has grown with its growth, has kept even pace with its development, and has contributed so much to its strength, reputation, and honor.

Its Medical School has sent forth thousands of graduates to all parts of our country, who have successfully and honorably illustrated its teachings by their devotion to a noble and humane profession. The Harvard Medical School has always enjoyed the distinction of being absolutely free from all pretence. It has always aimed to teach truth, and only truth. It has never claimed for the medical art more than is justly its due, as the assistant, and not the master, of Nature in her conquest of disease.

No patient of a Harvard medical graduate who has been true to the spirit of her teachings ever suffered artificial symptoms to be added to those of a natural disease. We are justly proud of the great names which this School has given to science and humanity. It may not be invidious to name James Jackson, the ideal physician,—trusted, beloved, and honored as few men have ever been; the elder and younger Bigelow, whose eminent mental gifts all know and admire, — the calm, massive intellectual force of the father, and the brilliant genius of the son, whose valuable contributions to surgical science Europe and America acknowledge; Holmes, the wit, poet, philosopher, the triple charm of whose genius brightens the literature of our time; Bowditch, whose ability and matchless energy have been through a long life devoted to the practice of his profession, to the cause of public medicine, and to the service of humanity. These are a few of the names we delight to honor. It can be fairly claimed that, in the methods and results of her teachings, Harvard has maintained a leading position in the marvellous progress of medical and surgical

science during this generation. In one respect, she stands peerless and alone. Within the medical halls of Harvard was the birthplace of the greatest boon which a beneficent Providence has bestowed upon suffering humanity. It was my privilege to witness the first public experiment of the anæsthetic effects of sulphuric ether; and, when the surgeon's knife passed through the tissues and no evidence of pain appeared, we saw that a new era had dawned upon human science, that thenceforth and forever surgery was robbed of its terrors. It would be futile to attempt to describe the important and far-reaching results of this unparalleled discovery.

Eye hath not seen, ear hath not heard, neither hath it entered into the heart of man to conceive the countless blessings which it will confer upon all the races of men through all time. It was fitting that our Commonwealth should be historically associated with this discovery. She has always been first in the great movements which have insured our country's safety, progress, and glory. Before landing upon these shores, the Pilgrim Fathers established the first compact founded upon the will of the people known to history. One hundred and fifty years later she thundered defiance to tyranny through the lips of Adams and Otis, and woke the sleeping lion of independence and liberty.

Upon the streets of Boston, on the plains of Lexington and slopes of Bunker Hill, the first blood

of the Revolution was shed. Still later Garrison, Phillips, Whittier, Sumner, and a host of others—all sons of Massachusetts—denounced without ceasing that crime of crimes, that sum of all villanies,—human slavery,—and provoked that moral conflict which could not cease till its cause was extinguished.

In the great struggle which ensued between union and disunion, slavery and freedom, she was the first to march her troops to the capital, and her blood was the first to be shed in defence of the integrity of the government. Upon a recent memorable occasion, when the portraits of four Speakers whom our State had given to Congress were presented to that body, a distinguished representative from Kentucky declared that for thirty-five years the men and principles of Massachusetts had controlled the policy of the national government. All men know the unequalled historical grandeur of this period, and the importance of the tribute paid to the influence of our Commonwealth. But this digression must not permit me to forget that in the domain of public medicine we are first among the foremost. The medical profession, composed largely of Harvard graduates, educated public sentiment which was reflected by the legislature in the passage of an act in 1869 establishing a State Board of Health. I need not dwell upon the varied and important work performed by this Board. It has educated the people upon subjects connected with sanitary science. It has sug-

gested and secured the passage of many wholesome and necessary laws, and it has administered the most important of these laws. Through its influence our rivers and lakes which furnish water for domestic use are protected from impurity, so far as practicable; and, where such impurity exists, it is pointed out, and its dangerous results exposed and remedies suggested. It has elaborated an efficient system of sewerage for seventeen cities and towns forming the metropolitan district, and which is now being rapidly constructed. It would indeed be difficult to enumerate the sanitary triumphs of this Board. Since its origin more than thirty State Boards of Health have been established in as many States of the Union, and all are doing valuable service. I cannot pass from this topic without mentioning the names of Bowditch, Derby, Folsom, Abbott, Walcott, all distinguished sanitarians who have performed invaluable service upon this Board. They all graduated from the Harvard Medical School, and she has a right to claim some share of the distinction they have so nobly earned. One word before closing in regard to the national claims of sanitary science.

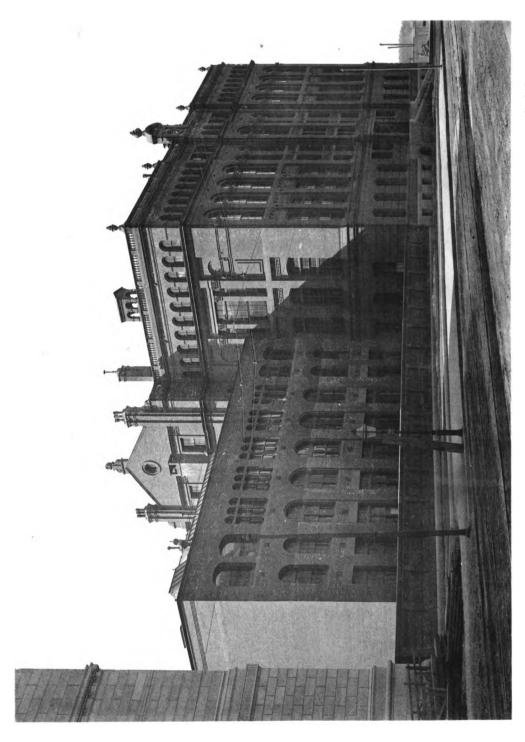
There should undoubtedly be established an efficient National Board or Bureau, which, co-operating with the State Boards, could also perform by the authority vested in it, and the larger opportunities it would have, work which they could not do. If the several State Boards of Health and the physicians

of our country would systematically use their influence upon Congress, I entertain no doubt that such a measure as would be satisfactory could be speedily passed. Mr. President and gentlemen, I sincerely trust that this Association will have a long and useful career. It can hardly fail to promote that fraternal spirit which should exist between gentlemen whose lives are devoted to one of the highest of human pursuits.

Dr. F. R. Sturgis, of New York, was introduced by the President as "our one redeeming Vice," and spoke briefly.

Dr. F. H. Brown, of Boston, offered the following motion, which was carried with great enthusiasm:—

The members of the Harvard Medical School Association, assembled at their first annual dinner, desire to send to Dr. D. Humphreys Storer, Dr. Oliver W. Holmes, Dr. G. C. Shattuck, and Dr. Henry Ingersoll Bowditch an expression of the sincere feelings of respect which they entertain toward them,—the senior members now living of the Faculty of the Medical School,—to express to them the grateful remembrance of the kindness with which they were received as young men, and led on step by step through the studies of the profession to which they have given their lives; and they venture to offer the hope for their long-continued life and happiness and the well-deserved appreciation of their brethren and of the community at large.



BULLETIN

OF THE

HARVARD MEDICAL SCHOOL ASSOCIATION

NUMBER 2

CATALOGUE



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TABLE OF CONTENTS.

				P	AGE
Constitution					5
LIST OF OFFICERS					9
LIST OF MEMBERS BY STATES AND TERRITORIES				•	13
LIST OF HONORARY MEMBERS					4 3
LIST OF LIFE MEMBERS					44
LIST OF DECEASED MEMBERS					45
SUMMARY OF MEMBERSHIP BY STATES AND TERR	ITO	RI	ES		46
ALPHABETICAL LIST OF MEMBERS					47

ILLUSTRATION.

THE MEDICAL SCHOOL BUILDING

CONSTITUTION OF THE HARVARD MEDICAL SCHOOL ASSOCIATION.

ARTICLE I.

The name of this Association shall be the "Harvard Medical School Association."

ARTICLE II.

The objects of this Association shall be to advance the cause of medical education, to promote the interests and increase the usefulness of the Harvard Medical School, and to promote acquaintance and good-fellowship among the members of the Association.

ARTICLE III.

SECTION 1. All graduates of the Harvard Medical School are eligible to be and may become members, if approved by the Council.

SECT. 2. By recommendation of the Council and by a two-thirds vote of the Society at any regular meeting, any member may be dropped.

SECT. 3. Every member shall pay an initiation fee of one dollar, and an annual due thereafter of one dollar; but any member may become a life member by the payment of twenty dollars in one payment, after which he shall be relieved from the payment of all dues.

SECT. 4. All physicians who have received any honorary degree from Harvard University shall be *ipso facto* honorary members of the Association. Honorary members may also be elected by this Association on nomination by the Council.

ARTICLE IV.

The officers of the Association shall be a President, ten Vice-Presidents, a Secretary, a Treasurer, and a Council of fifteen

members. The President, Secretary, and Treasurer shall be exofficio members of the Council.

ARTICLE V.

SECTION 1. The President, Vice-Presidents, Secretary, and Treasurer shall be elected for the term of three years.

SECT. 2. The members of the Council, not members ex officio, shall be elected in classes as follows: at the first meeting of the Association, three members of the Council shall be elected for the term of four years, three members for the term of three years, three members for the term of one year; and thereafter, at the annual meeting of the Association in each year, three members shall be elected for the full term of four years, to fill the places of those whose term of office shall then have expired.

SECT. 3. Vacancies occurring in any of the offices before the expiration of the respective terms shall be filled at the annual meeting next following the occurrence of such vacancies. The Council shall have the power to fill a vacancy in the offices of Secretary or Treasurer for the remainder of the current year.

SECT. 4. All officers of the Association shall hold their respective offices during the regular term thereof, and until their successors shall be elected and qualified.

ARTICLE VI.

The annual meeting of the Association shall be held at Boston, Massachusetts, on the Tuesday preceding the annual Commencement of Harvard College; provided, however, that the Council shall have the power to appoint in any year a different time and place for the annual meeting, if deemed expedient.

ARTICLE VII.

The President or the Council shall have the power to call a special meeting of the Association at any time, provided that at least two weeks' previous notice be given to all members of the Association.

ARTICLE VIII.

SECTION 1. The executive power of the Association shall be vested in the Council, subject to the control and direction of the Association.

SECT. 2. The Council shall have the power to elect from its own members an Executive Committee of not less than three members, to whom may be delegated such powers as the Council shall deem expedient.

SECT. 3. The Council shall elect every year from its own members a "Committee on the Harvard Medical School," and may elect such other committees from its own members or the Association at large as it shall, from time to time, deem expedient to carry out the objects of the Association.

SECT. 4. The Council shall have the power to appoint, from time to time, one or more Corresponding Secretaries in the different cities or towns of the United States and the British North American provinces. It shall be the duty and office of such Corresponding Secretaries to promote in their respective localities the objects and interests of the Association.

SECT. 5: The Council shall have the power to fix the number of members of the Association necessary to constitute a quorum for the transaction of any and all business save that of amending the Constitution, and to fix also the number of their own members necessary to constitute a quorum of the Council.

ARTICLE IX.

The Secretary, Treasurer, the Council, and the Committee on the Harvard Medical School shall make and submit to the Association, at its annual meeting in each year, reports in writing or print of their respective doings for the preceding year.

ARTICLE X.

This Constitution may be amended by a majority vote of all the members of the Association present at the annual meeting, or at any special meeting called for that purpose, notice of such amendment having been given in the call for the meeting.





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1891-92.

President.

JAMES READ CHADWICK, M.D. 1871, 270 Clarendon Street, Boston, Mass.

Dice-Presidents.

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James Milton Flint, M.D. 1860, Navy Department, Washington, D.C. William Abraham Haskell, M.D. 1869, Alton, Ill.

Amos Howe Johnson, M.D. 1865, 26 Winter Street, Salem, Mass.

GEORGE HERMAN POWERS, M.D. 1865, 215 Geary Street, San Francisco, Cal.

FREDERICK RUSSELL STURGIS, M.D. 1867, 16 W. 32d Street, New York, N.Y.

VERNON OTIS TAYLOR, M.D. 1868, Box 1459, Providence, R.I. JOHN ORDWAY WEBSTER, M.D. 1868, 59 State Street, Augusta, Me.

Treasurer.

WALTER ELA, M.D. 1875, 62 Brattle Street, Cambridge, Mass.

Secretary.

ROBERT WILLIAMSON LOVETT, M.D. 1885, 379 Boylston Street, Boston, Mass.

Councillors.

FOR THE TERM OF FOUR YEARS.

CHARLES FOLLEN FOLSOM, M.D. 1870, 15 Marlborough Street, Boston, Mass.

10

HARVARD MEDICAL SCHOOL ASSOCIATION.

GEORGE EBENEZER FRANCIS, M.D. 1863, 79 Elm Street, Worcester, Mass.

LINCOLN RIPLEY STONE, M.D. 1854, Newton, Mass.

FOR THE TERM OF THREE YEARS.

WILLIAM STURGIS BIGELOW, M.D. 1874, 60 Beacon Street, Boston, Mass.

SILAS DEAN PRESBREY, M.D. 1865, Taunton, Mass.

FRANCIS MINOT WELD, M.D. 1864, Storey Place, Jamaica Plain, Mass.

FOR THE TERM OF TWO YEARS.

JOHN TAYLOR GILMAN NICHOLS, M.D. 1859, 63 Brattle Street, Cambridge, Mass.

EDWARD WIGGLESWORTH, M.D. 1865, 188 Beacon Street, Boston, Mass. Alfred Worcester, M.D. 1883, 742 Main Street, Waltham, Mass.

FOR THE TERM OF ONE YEAR.

FRANCIS HENRY BROWN, M.D. 1861, 75 Westland Avenue, Boston, Mass.

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CHARLES CARROLL TOWER, M.D. 1859, Weymouth, Mass.

NOTE.

MEMBERS will confer a favor by reporting to the Committee on Publication any errors or omissions in this Catalogue.

The date of the medical degree is taken from the records of Harvard University.

Walter Ela, Treasurer, Cambridge, Mass., ROBERT W. LOVETT, Secretary, Boston, Mass., COMMITTER.

APRIL, 1892.

LIST OF MEMBERS BY STATES AND TERRITORIES.

ARIZONA.

CRAIG, SYDNEY MORGAN, M.D. 1886, Holbrook, Apache County. HUSE, GEORGE WOOD, M.D. 1883, 7th Street, Tombstone.

CALIFORNIA.

SAN FRANCISCO.

AYER, WASHINGTON, M.D. 1847, 1622 Clay Street.
BOYD, SAMUEL GEORGE, M.D. 1885, 3118 Sacramento Street.
BRIGHAM, CHARLES BROOKS, M.D. 1870, 703 Market Street.
GRIMM, CHARLES HENRY, M.D. 1883, Post and Powell Streets.
LUX, FREDERICK WILLIAM, M.D. 1885, 703 Market Street.
MACMONAGLE, BEVERLY, M.D. 1876, 430 Kearney Street.
MANN, FREDERICK PORTER, M.D. 1848, 2223 Sutter Street.
PEASE, GILES MOSELEY, M.D. 1863, 125 Turk Street.
POWERS, GEORGE HERMAN, M.D. 1865, 533 Sutter Street.
SHARKEY, JAMES MICHAEL, M.D. 1849, 514 Kearney Street.
WHITWELL, WILLIAM SCOLLAY, M.D. 1872, 903 Sutter Street.

OTHER CITIES AND TOWNS.

Buxton, Gonzalo Edward, M.D. 1876, National City.
Clare, Jonas, M.D. 1875, P.O. Box 365, Woodland.
Knight, Benjamin, M.D. 1869, Santa Cruz.
McSwain, Angus, M.D. 1873, P.O. Box 545, Santa Clara.
Paterson, Edward Mortimer, M.D. 1871, 1065 Washington Street,
Oakland.

PILLSBURY, HARLIN HENRY, M.D. 1859, Auburn.
PINKERTON, THOMAS HAMEL, M.D. 1859, 1155 Broadway, Oakland.
SAWYER, WILLIAM BREWSTER, M.D. 1879, Riverside.
SHURTLEFF, BENJAMIN, M.D. 1848, Napa.

SIMMONS, GUSTAVUS CROCKER, M.D. 1885, 212 J Street, Sacramento. SIMMONS, GUSTAVUS LINCOLN, M.D. 1856, 212 J Street, Sacramento. SOUTHARD, WILLIAM FREEMAN, M.D. 1872, 1115 Broadway, Oakland. Worcester, Samuel, M.D. 1868, Los Angeles.

COLORADO.

Fisk, Samuel Augustus, M.D. 1880, 37 18th Avenue, Denver.
Hall, Josiah Newhall, M.D. 1882, Sterling.
Leavitt, Byron Charles, M.D. 1887, 726 14th Street, Denver.
Lyman, Charles Baldwin, M.D. 1886, 16th and Stout Streets,
Denver.

PFEIFFER, OSCAR JOSEPH, M.D. 1884, 8 and 9 Barth Block, Denver. WHITNEY, HERBERT BAKER, M.D. 1882, 10 Masonic Temple, Denver.

CONNECTICUT.

DUNHAM, MARTIN VAN BUREN, M.D. 1867, Greenfield Hill. GARLICK, SAMUEL MIDDLETON, M.D. 1877, 256 Slade Street, Bridgeport. GRAVES, CHARLES BURR, M.D. 1886, 22 Franklin Street, New London. HALL, EDWARD DORMENIO, M.D. 1873, 284 East Main Street, Meriden. HAMMOND, HENRY LOUIS, M.D. 1866, P.O. Box 214, Killingly. HIBBARD, NATHANIEL, M.D. 1882, Danielsonville. KENT, JOHN BRYDEN, M.D. 1869, 19 Church Street, Putnam. LEWIS, WILLIAM ALBERT, M.D. 1851, Moosup. LOPEZ, RAFAEL, M.D. 1877, 84 Cherry Street, Waterbury. MASON, JARVIS KING, M.D. 1861, Suffield. NELSON, ABIEL WARD, M.D. 1861, 1 Meridian Street, New London. RICHARDSON, DANA PUTNAM, M.D. 1882, Newtown. RICHARDSON, LEONARD EDMUND, M.D. 1857, 99 Park Street, Hartford. TAFT, CHARLES EZRA, M.D. 1886, 98 High Street, Hartford. WARREN, EDWARD WINSLOW, M.D. 1883, 212 Main Street, Ansonia.

DISTRICT OF COLUMBIA.

FLINT, JAMES MILTON, M.D. 1860, Navy Department, Washington. STEARNS, JOHN, M.D. 1860, 2117 G Street, Washington.

FLORIDA.

WAKEFIELD, ADONIRAM JUDSON, M.D. 1855, 61 Ocean Street, Jacksonville.

ILLINOIS.

CHICAGO.

COOLIDGE, FREDERIC SHURTLEFF, M.D. 1891, 2710 Prairie Avenue. DeWolf, James Edward, M.D. 1866, 440 Englewood Avenue. HOOPER, HENRY, M.D. 1869, 541 N. State Street. KALES, JOHN DAVIS, M.D. 1887, 65 Randolph Street. PRITTIE, WILLIAM HENRY, M.D. 1868, 88 State Street. SAWYER, EDWARD WARREN, M.D. 1873, 3733 Vincennes Avenue. Tucker, James Ioannas, M.D. 1867, 52 35th Street. WEBSTER, JOHN CALVIN, M.D. 1867, 820 Jackson Boulevard. WHIDDEN, PHILON CURRIER, M.D. 1866, 135 S. Western Avenue. WILSON, JOHN HARPIN, M.D. 1881, 220 Dearborn Avenue.

OTHER CITIES AND TOWNS.

BURCHMORE, JOHN HENRY, M.D. 1875, 1005 Davis Street, Evanston. HASKELL, WILLIAM ABRAHAM, M.D. 1869, Alton. OLESON, CHARLES WILMOT, M.D. 1866, Lombard. RANDALL, JOHN NEWTON, M.D. 1867, 437 East El Dorado Street, Decatur.

INDIANA.

HODGES, EDWARD FRANCIS, M.D. 1887, 2 West New York Street, Indianapolis.

LEWIS, EDWIN RUFUS, M.D. 1867, 257 N. Delaware Street, Indianapolis.

IOWA.

BURBANK, OSCAR, M.D. 1848, Waverly, Bremer County. CONNELLY, M. EMMET, M.D. 1870, 850 Locust Street, Dubuque. KIBBEY, WILLIAM BECKFORD, M.D. 1882, Marshalltown.

KANSAS.

MARSTERS, GEORGE W, M.D. 1865, Cawker City. TENNEY, ASA PEASLEE, M.D. 1859, 540 Minnesota Avenue, Kansas

WHITE, LUTHER ROBINSON, M.D. 1878, Scandia.

KENTUCKY.

BLOOM, ISADORE NATHAN, M.D. 1881, W. Walnut Street, Louisville. McNary, Hugh Flournoy, M.D. 1863, Princeton.

MAINE.

ADAMS, ENOCH, M.D. 1851, Litchfield. BOYD, ROBERT, M.D. 1868, Linneus. CHANDLER, FREDERICK ALPHEUS, M D. 1883, Addison. CLARKE, AUGUSTUS TUPPER, M.D. 1870, Church Avenue, Calais. DANA, ISRAEL THORNDIKE, M.D. 1850, 181 State Street, Portland. EDMUNDS, CHARLES DOLE, M.D. 1886, 73 Hammond Street, Bangor. GIDDINGS, WOOSTER PARKER, M.D. 1871, Gardner. GOODALE, WALTER TEMPLE, M.D. 1887, 122 Main Street, Saco. HOPKINS, ELISHA, M.D. 1854, Searsport. JACKSON, ALTON ATWELL, M.D. 1883, East Jefferson. JONAH, JOHN MARINER, M.D. 1860, Eastport. LINCOLN, ARTHUR TALBOT, M.D. 1889, Dennysville. MASON, WILLIAM CASTEIN, M.D. 1878, Bangor. MILLIKEN, CHARLES JAMES, M.D. 1866, Cherryfield. PHILLIPS, JERRIE KNOWLTON, M.D. 1885, 54 Ohio Street, Bangor. REYNOLDS, HENRY, M.D. 1869, Livermore Falls. ROGERS, JOHN CONWAY, M.D. 1864, Pembroke. THAYER, ADDISON SANFORD, M.D. 1888, 639 Congress Street, Portland. WEBSTER, JOHN ORDWAY, M.D. 1868, 59 State Street, Augusta.

MARYLAND.

BALTIMORE.

FINNEY, JOHN MILLER TURPIN, M.D. 1889, 923 N. Charles Street. JACOBS, HENRY BARTON, M.D. 1887, 11 Mt Vernon Place. MOSELEY, WILLIAM EDWARD, M.D. 1874, 614 N. Howard Street. THAYER, WILLIAM SYDNEY, M.D. 1889, Johns Hopkins Hospital.

MASSACHUSETTS.

BOSTON.

ABBOT, SAMUEL LEONARD, M.D. 1841, 90 Mt. Vernon Street.

AIKEN, ELISHA WILBOUR, M.D. 1864, 543 Boylston Street.

ALLEN, GARDNER WELD, M.D. 1882, 90 Charles Street.

AMORY, ROBERT, M.D. 1866, 279 Beacon Street.

AYER, JAMES BOURNE, M.D. 1873, 53 Mt. Vernon Street.

AYER, SILAS HIBBARD, M.D. 1884, 318 Shawmut Avenue.

BAKER, JOHN WALTER, M.D. 1881, U.S. Navy, Charlestown.

BAKER, WILLIAM HENRY, M.D. 1872, 22 Mt. Vernon Street.

BALDWIN, HENRY CUTLER, M.D. 1884, 172 Commonwealth Avenue.

Barnes, Henry Jabez, M.D. 1872, 429 Beacon Street.
Barstow, Henry Taylor, M.D. 1884, 9 Beacon Street.
Beach, Henry Harris Aubrey, M.D. 1868, 28 Commonwealth

Belt, Charles Bradford, M.D. 1871, 511 East Broadway.
Bigelow, William Sturgis, M.D. 1874, 60 Beacon Street.
Blaisdell, Walter Channing, M.D. 1867, 59 Chambers Street.
Blake, Clarence John, M.D. 1865, 226 Marlborough Street.
Blake, John George, M.D. 1861, 1330 Washington Street.
Blodgett, Albert Novatus, M.D. 1871, 390 Boylston Street.
Blood, Robert Allen, M.D. 1870, 6 Dexter Row, Charlestown.
Boardman, William Elbridge, M.D. 1868, 18 Huntington Avenue.
Boardman, William Sydney, M.D. 1886, 6 Bowdoin Street.
Bolles, William Palmer, M.D. 1871, "The Warren," Roxbury.
Bolton, Charles James, M.D. 1888, Boston Lunatic Hospital, South Boston.

Bowditch, Henry Pickering, M.D. 1868, Jamaica Plain.
Bowditch, Vincent Yardley, M.D. 1879, 324 Boylston Street.
Bowen, John Templeton, M.D. 1884, 14 Marlborough Street.
Bowen, Seranus, M.D. 1876, 322 Warren Street, Roxbury.
Brackett, Elliott Gray, M.D. 1886, 149 Newbury Street.
Bradford, Edward Hickling, M.D. 1873, 218 Beacon Street.
Bradford, Henry Withington, M.D. 1875, 6 Beacon Street.
Brainerd, John Bliss, M.D. 1884, 18 Huntington Avenue.
Brechin, William Pitt, M.D. 1872, 16 Temple Street.
Briggs, Edward Cornelius, M.D. 1880, 125 Marlborough Street.
Briggs, Frederic Melancthon, M.D. 1883, 15 Charles Street.
Brigham, Edwin Howard, M.D. 1863, 19 Boylston Place.
Broughton, Henry White, M.D. 1879, 17 Gordon Street, Jamaica Plain.

Brown, Francis Henry, M.D. 1861, 75 Westland Avenue.
Brownrigg, John Sylvester, M.D. 1887, 16 Delle Avenue.
Bryant, John, M.D. 1878, 54 Kilby Street.
Buckingham, Edward Marshall, M.D. 1874, 53 Worcester Street.
Bullard, William Norton, M.D. 1880, 89 Marlborough Street.
Bundy, Frank Eastman, M.D. 1862, 402 Columbus Avenue.
Burgess, Oliver Graham, M.D. 1885, 9 Park Square.
Burrage, Walter Lincoln, M.D. 1888, 140 Marlborough Street.
Burrage, Walter Leslie, M.D. 1879, 22 Newbury Street.
Bush, John Standish Foster, M.D. 1874, 651 Boylston Street.
Bushee, James Anson, M.D. 1870, 133 Princeton Street, East Boston.
Butman, George Feveryear, M.D. 1865, 327 Boston Street, Dorchester.

CABOT, ARTHUR TRACY, M.D. 1876, 3 Marlborough Street.

Callanan, Samson Aloysius, M.D. 1886, 179 Dudley Street, Roxbury.

CAMPBELL, BENJAMIN FRANKLIN, M.D. 1857, 33 Princeton Street, East Boston.

CARTER, CYRUS FAULKNER, M.D. 1887, 28 Beacon Street.

CHADWICK, JAMES READ, M.D. 1871, 270 Clarendon Street.

CHEEVER, CLARENCE ALONZO, M.D. 1883, Norfolk Street, Mattapan.

CHEEVER, DAVID WILLIAM, M.D. 1858, 557 Boylston Street.

CHENERY, ELISHA, M.D. 1853, 65 Chandler Street.

CHENERY, WILLIAM ELISHA, M.D. 1890, 67 Chandler Street.

CHENEY, FREDERICK EDWARD, M.D. 1885, Hotel Bristol.

CLARK, JOSEPH PAYSON, M.D. 1887, 385 Marlborough Street.

CLEMENT, GEORGE WILMOT, M.D. 1873, 1 Greenville Street, Roxbury.

CLIFF, LEANDER ALBERT, M.D. 1874, 425 Shawmut Avenue.

COBB, CHARLES HENRY, M.D. 1881, 459 Columbus Avenue.

COBB, FREDERIC CODMAN, M.D. 1887, 102 Charles Street.

CODMAN, BENJAMIN STORER, M.D. 1845, 13 Tremont Street COGAN, JOSEPH AMBROSE, M.D. 1887, 39 Chambers Street.

Cogswell, Charles Hale, M.D. 1883, Deer Island, Boston Harbor.

Collins, David Aloysius, M.D. 1886, 11 Parmenter Street.

CONANT, WILLIAM MERRITT, M.D. 1884, 252 Newbury Street.

COOLIDGE, ALGERNON, JR., M.D. 1886, 81 Marlborough Street.

CROWELL, SAMUEL, M.D. 1885, 8 Monadnock Street, Dorchester.

CROWELL, SAMUEL, M.D. 1999, 6 Monadock Street, Dorchestel

CROZIER, THOMAS, M.D. 1863, 223 Main Street, Charlestown.

CURTIS, HALL, M.D. 1857, 2 Spruce Street.

Cushing, Benjamin, M.D. 1846, Percival Avenue, Dorchester.

CUSHING, HAYWARD WARREN M.D. 1882, 399 Boylston Street.

Cushing, Joseph Whitney, M.D. 1861, 29 Worcester Street.

CUTLER, ELBRIDGE GERRY, M.D. 1872, 214 Beacon Street.

CUTLER, WILLIAM BULLARD, M.D. 1872, 35 Dover Street.

CUTTER, CHARLES KIMBALL, M.D. 1876, 208 Main Street, Charlestown.

Daniels, Edwin Alfred, M.D. 1877, 302 Newbury Street.

DARRAH, RUFUS ELMER, M.D. 1890, 387 Boylston Street.

DAVENPORT, BENNETT FRANKLIN, M.D. 1871, 161 Tremont Street.

DAVENPORT, FRANCIS HENRY, M D. 1874, 5 Park Square.

DAVIS, SAMUEL ALONZO, M.D. 1862, 195 Main Street, Charlestown.

Davison, Archibald Thompson, M.D. 1871, 392 Broadway, South Boston.

DAY, ALBERT, M.D. 1866, 41 Waltham Street.

DERBY, WILLIAM PARSONS, M.D. 1890, 86 Charles Street.

DISBROW, ROBERT, M.D. 1865, 73 Oak Street.

DIXON, LEWIS SEAVER, M.D. 1871, 232 Clarendon Street.

DIXON, ROBERT BREWER, M.D. 1879, 232 Clarendon Street.

Dodge, William Wooldredge, M.D. 1886, 670 Shawmut Avenue.

Dorcey, James Edmund, M.D. 1878, 165 Harrison Avenue.

Dow, Edmund Scott, M.D. 1887, 14 Harvard Avenue, Allston.
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Drummey, Nicholas Daniel, M.D. 1887, 548 Shawmut Avenue.
Dunbar, Eugene Fillmore, M.D. 1880, 3042 Washington Street, Roxbury.

Dunn, William Aloysius, M.D. 1875, 60 Chambers Street.

Durgin, Samurl Holmes, M.D. 1864, 175 Newbury Street.

Dutton, Samurl Lane, M.D. 1860, 534 Warren Street, Roxbury.

Dwight, Thomas, M.D. 1867, Harvard Medical School.

Eastman, Edmund Tucker, M.D. 1850, 293 Shawmut Avenue.

Edes, Robert Thaxter, M.D. 1861, Adams Nervine Asylum, Jamaica Plain.

EHRLICH, HENRY, M.D. 1886, 669 Tremont Street.

ELDRIDGE, DAVID GORHAM, M.D. 1886, Hotel Gladstone, Dorchester.

ELLIOT, JOHN WHEELOCK, M.D. 1878, 75 Marlborough Street.

ELLIOTT, RUSSKLL DUNSON, M.D. 1873, 154 Richmond Street.

EMERY, WILLIAM HENRY, M.D. 1870, 109 Warwick Street, Roxbury.

ENSWORTH, WILLIAM HOWARD, M.D. 1888, 7 Chelsea Street, East Boston.

ERNST, HAROLD CLARENCE, M.D. 1880, 24 Greenough Avenue, Jamaica Plain.

FARLOW, JOHN WOODFORD, M.D. 1877, 234 Clarendon Street.
FERNALD, CHARLES AUGUSTUS, M.D. 1872, 1483 Washington Street.
FIFIELD, WILLIAM CRANCH BOND, M.D. 1851, 4 Ashland Street, Dorchester.

FILLEBROWN, CHARLES DALTON, M.D. 1887, 254 Warren Street, Roxbury.

FINN, EDWARD WILLIAM, M.D. 1890, 1627 Tremont Street, Roxbury. FINN, JAMES ANTHONY, M.D. 1875, 842 Dudley Street, Roxbury. FISHER, THEODORE WILLIS, M.D. 1861, Lunatic Hospital, P.O. Box 2307, South Boston.

Fitz, Reginald Heber, M.D. 1868, 18 Arlington Street.
FOGG, WILLIAM JOHN GORDON, M.D. 1876, 494 Broadway, South

FOLEY, WALTER JAMES PAUL, M.D. 1888, 39 Edgewood Street, Roxbury.

Folsom, Charles Follen, M.D. 1870, 15 Marlborough Street.
Forster, Edward Jacob, M.D. 1868, 440 West Chester Park.
Fraser, Donald Allan, M.D. 1891, 108 Meridian Street, East Boston.
Galligan, Eugene Thomas, M.D. 1882, 84 Warren Street, Roxbury.
Galloupe, Charles William, M.D. 1883, 657 Boylston Street.
Galvin, George William, M.D. 1878. United States Hotel.
Garceau, Edgar, M.D. 1889, 22 Highland Street, Roxbury.
Garland, George Minot, M.D. 1874, 227 Newbury Street.
Gates, George Wellesley, M.D. 1884, Roxbury.

GAVIN, MICHAEL FREEBERN, M.D. 1864, 546 Broadway, South Boston. GAVIN, PATRICK FREEBERN, M.D. 1870, 331 Broadway, South Boston. GAY, GEORGE WASHINGTON, M.D. 1868, 665 Boylston Street. GERRY, EDWIN PEABODY, M.D. 1874, 2 Everett Street, Jamaica Plain. GOLDTHWAITE, JOEL ERNEST, M.D. 1890, 437 Boylston Street. Goss, Francis Webster, M.D. 1869, 217 Warren Street, Roxbury. GREEN, CHARLES MONTRAVILLE, M.D. 1877, 78 Marlborough Street. GREEN, JOHN ORNE, M.D. 1866, 182 Marlborough Street.

GREEN, SAMUEL ABBOTT, M.D. 1854, 30 Tremont Street.

GREENE, EDWARD MILLER, M.D. 1888, 8 Hancock Street.

GREENE, JAMES SUMNER, M.D. 1863, 1107 Washington Street, Dorches-

GREENLEAF, ROBERT WILLARD, M.D. 1885, 561 Boylston Street. GREENOUGH, FRANCIS BOOTT, M.D. 1866, 10 Charles Street. HAHN, AMMI RUHAMAH, M.D. 1869, 13 Central Square, East Boston. HALL, NEWBERT JACKSON, M.D. 1885, 347 Main Street, Charlestown. HALL, WILLIAM DUDLEY, M.D. 1883, 387 Boylston Street. HAMMOND, WILLIAM PENN, M.D. 1873, 47 Monument Square, Charlestown.

HARE, CHARLES HENRY, M.D. 1889, 379 Boylston Street. HARKINS, DANIEL STANISLAUS, M.D. 1888, Long Island, Boston Har-

HARMON, SAMUEL TAPPAN, M.D. 1881, 249 Tremont Street. HARRINGTON, CHARLES, M.D. 1881, 57 Orchard Street, Jamaica Plain. HARRINGTON, FRANCIS BISHOP, M.D. 1881, 201 Beacon Street.

HARRIS, FRANCIS AUGUSTINE, M.D. 1872, 59 Chambers Street,

HARTNETT, MAURICE KING, M.D. 1859, 178 Harrison Avenue.

HASLAM, FRANK ALDEN, M.D. 1885, 16 Parmenter Street.

HASTINGS, WILLIAM HENRY Howe, M.D. 1868, 284 Marlborough Street.

HAVEN, GEORGE, M.D. 1883, 92 Pinckney Street.

HAVEN, HENRY CECIL, M.D. 1879, 82 Beacon Street.

HAYWARD, GEORGE, M.D. 1843, 381 Beacon Street.

HAYWARD, GEORGE GRISWOLD, M.D. 1881, 165 Newbury Street.

HEARD, JOHN THEODORE, M.D. 1859, 20 Louisburg Square.

HICKS, JOSEPH, M.D. 1890, 155 Huntington Avenue.

HILL, JOHN BOGARDUS, M.D. 1852, 32 Boylston Street.

HODGES, RICHARD MANNING, M.D. 1850, 408 Beacon Street.

Hodges, William Donnison, M.D. 1881, 6 Gloucester Street.

HOLMES, WILLIAM DENNISON, M.D. 1882, 202 Main Street, Charlestown.

HOLYOKE, WILLIAM COOK, M.D. 1872, 413 Shawmut Avenue.

Homans, John, M.D. 1862, 164 Beacon Street.

Homans, John, 2d, M.D. 1882, 184 Marlborough Street.

HOOPER, FRANKLIN HENRY, M.D. 1877, 85 Beacon Street.

Howard, Arthur Chadwick, M.D. 1877, 91 Mt. Vernon Street. Howe, James Sullivan, M.D. 1881, 15 Charles Street. Hubbard, Rufus Peabody, M.D. 1883, 4 Park Square. Hurley, Daniel Bartholomew, M.D. 1887, 370 Sumner Street, East Boston.

Hyde, George Smith, M.D. 1856, 72 West Newton Street.
Inches, Charles Edward, M.D. 1865, 88 Charles Street.
Ingalls, William, M.D. 1886, 556 Tremont Street.
Jack, Edwin Everett, M.D. 1887, 437 Boylston Street.
Jack, Frederick Lafayette, M.D. 1884, 437 Boylston Street.
Jackson, Henry, M.D. 1884, 309 Marlborough Street.
Jackson, James Marsh, M.D. 1891, Massachusetts General Hospital.
Jackson, William Leavitt, M.D. 1876, 86 Dudley Street, Roxbury.
Jarvis, John Furness, M.D. 1853, 56 Chambers Street.
Jeffries, Benjamin Joy, M.D. 1857, 15 Chestnut Street.
Jeffries, Benjamin Joy, M.D. 1868, 69 Newbury Street.
Jenkins, George Oscar, M.D. 1874, 510 Broadway, South Boston.
Jenks, Thomas Leighton, M.D. 1854, 10 Allen Street.
Jillson, Franklin Campbell, M.D. 1886, Centre Street, West Roxbury.

Johnson, Frank Mackie, M.D. 1883, The Tudor.
Johnson, Frederick William, M.D. 1881, 167 Newbury Street.
Jones, George Howard, M.D. 1864, 25 Temple Street.
Jones, Lyman Asa, M.D. 1891, "Woodbourne," Roslindale.
Kennedy, George Golding, M.D. 1867, 284 Warren Street, Roxbury.

KENNEFICK, JOSEPH ALOYSIUS, M.D. 1890, 238 Huntington Avenue. KILBURN, HENRY WHITMAN, M.D. 1884, 192 Marlborough Street. KIMPTON, EDWIN SEWELL, M.D. 1887, 421 Main Street, Charlestown. KNAPP, PHILIP COOMBS, M.D. 1883, 33 Marlborough Street. KNIGHT, AUGUSTUS SMITH, M.D. 1890, 295 Beacon Street. KNIGHT, FREDERICK IRVING, M.D. 1866, 377 Boylston Street. Knowles, William Fletcher, M.D. 1885, 314 Boylston Street. LAMSON, JOHN AUGUSTUS, M.D. 1856, 58 Temple Street. LANCASTER, WALTER BRACKETT, M.D. 1889, 164 Newbury Street. LANE, EDWARD BINNEY, M.D. 1885, Austin Farm, Dorchester. LANGMAID, SAMUEL WOOD, M.D. 1864, 373 Boylston Street. LAWLER, THOMAS JOSEPH, M.D. 1882, 54 Chambers Street. LELAND, GEORGE ADAMS, M.D. 1878, 669 Boylston Street. Louis, Isaac, M.D. 1885, 354 Tremont Street. LOVETT, ROBERT WILLIAMSON, M.D. 1885, 379 Boylston Street. LYON, HENRY, M.D. 1838, 34 Monument Square, Charlestown. MACDONALD, RUFUS CYRENE, M.D. 1883, 34 Parmenter Street. MACDONALD, WILLIAM GREGORY, M.D. 1885, 221 Shawmut Avenue. MACDONALD, WILLIAM LEWIS, M.D. 1865, 149 A Tremont Street.

McCollom, John Hildreth, M.D. 1869, 12 Newbury Street.
McGlynn, Edward, M.D. 1886, 121 Vernon Street, Roxbury.
Mackie, William Basilio, M.D. 1862, 675 Tremont Street.
McMichael, Willis Brooks, M.D. 1881, 4 Saratoga Street, East Boston.

MALLORY, FRANK BURR, M.D. 1890, 615 Tremont Street.

MARCY, HENRY ORLANDO, M.D. 1864, 338 Boylston Street.

MARION, OTIS HUMPHREY, M.D. 1878, 22 Harvard Avenue, Allston.

MARTIN, FRANCIS COFFIN, M.D. 1883, 27 Dudley Street, Roxbury.

MASON, AMOS LAWRENCE, M.D. 1872, 265 Clarendon Street.

MCNALLY, WILLIAM JOSEPH, M.D. 1887, 172 Bunker Hill Street,
Charlestown.

McQueeney, Francis Joseph, M.D. 1890, 35 West Dedham Street.
Mecuen, George Edward, M.D. 1875, 1083 Tremont Street.
Minot, Francis, M.D. 1844, 65 Marlborough Street.
Minot, James Jackson, M.D. 1878, 188 Marlborough Street.
Mixter, Samuel Jason, M.D. 1879, 180 Marlborough Street.
Monks, George Howard, M.D. 1880, 399 Boylston Street.
Moran, John Brennan, M.D. 1864, 59 West Brookline Street.
Moroney, William Joseph, M.D. 1890, 433 Dudley Street, Roxbury.
Morrill, Ferdinand Gordon, M.D. 1869, 181 Beacon Street.
Morris, Michael Augustus, M.D. 1873, 308 Main Street, Charlestown.

MORRISON, WILLIAM ALEXANDER, M.D. 1889, 80 Princeton Street, East Boston.

MORSE, EDWARD GILEAD, M.D. 1870, 94 Warren Street, Roxbury.
MUMFORD, JAMES GRKGORY, M.D. 1890, 197 Beacon Street.
MUNRO, JOHN CUMMINGS, M.D. 1885, 367 Boylston Street.
MURPHY, FRANCIS CHARLES, M.D. 1886, 1609 Tremont Street, Roxbury.

NICHOLS, ARTHUR HOWARD, M.D. 1866, 55 Mt. Vernon Street.
OGDEN, WILLIAM MARTYN, M.D. 1866, 520 Shawmut Avenue.
OLIVER, HENRY KEMBLE, M.D. 1855, 12 Ashburton Place.
OLIVER, JOSEPH PEARSON, M.D. 1871, 102 Beacon Street.
OSMAN, CHARLES FRANKLIN, M.D. 1880, 942 Dorchester Avenue.
OTIS, EDWARD OSGOOD, M.D. 1877, 93 Mt. Vernon Street.
OTIS, WALTER JOSEPH, M.D. 1880, 6 Beacon Street.
PADULA, THOMAS FRANCIS, M.D. 1887, Neponset.
PAIGE, JOHN DUDLEY, M.D. 1888, 787 Broadway, South Boston.
PAYNE, JAMES HENRY, JR., M.D. 1889, 344 Commonwealth Avenue.
PERKINS, EDWARD AUGUSTUS, M.D. 1854, 558 Tremont Street.
PERRY, ARTHUR PEDRO, M.D. 1886, 10 Gordon Street, Jamaica Plain.
PERRY, JOSEPH FRANKLIN, M.D. 1873, 248 Boylston Street.
PETERS, EDWARD DYER, JR., M.D. 1877, Percival Avenue, Dorchester.
PRATT, JOHN WASHBURN, M.D. 1886, Massachusetts General Hospital.

PRESCOTT, WILLIAM HERBERT, M.D. 1888, 558 Boylston Street.

PRINCE, MORTON HENRY, M.D. 1879, 71 Marlborough Street.

PORTER, CHARLES BURNHAM, M.D. 1865, 5 Arlington Street.

POST, ABNER, M.D. 1870, 16 Newbury Street.

PUTNAM, CHARLES PICKERING, M.D. 1869, 63 Marlborough Street.

PUTNAM, JAMES JACKSON, M.D. 1870, 106 Marlborough Street.

REYNOLDS, EDWARD, M.D. 1885, 130 Marlborough Street.

RICHARDS, GEORGE EDWARD, M.D. 1883, 220 Clarendon Street.

RICHARDSON, MAURICE HOWE, M.D. 1877, 224 Beacon Street.

RICHARDSON, WILLIAM LAMBERT, M.D. 1867, 225 Commonwealth Avenue.

ROBBINS, ELLIOTT DANIEL, M.D. 1879, 46 High Street, Charlestown.
ROLFE, WILLIAM ALFRED, M.D. 1890, 467 Columbus Avenue.
ROTCH, THOMAS MORGAN, M.D. 1874, 197 Commonwealth Avenue.
ROWE, GEORGE HOWARD MALCOLM, M.D. 1868, Boston City Hospital.
RUDDICK, WILLIAM HENDERSON, M.D. 1868, 502 East Broadway, South
Boston.

SARGENT, GEORGE AMORY. M.D. 1888, 92 Charles Street.

SAWIN, CHARLES DEXTER, M.D. 1883, 349 Main Street, Charlestown.

SCOFIELD, COLUMBUS SEWELL, M.D. 1883, 1 Bulfinch Place.

SCUDDER, CHARLES LOCKE, M.D. 1888, 94 Charles Street.

SEARS, GEORGE GRAY, M.D. 1885, 89 Charles Street.

SEARS, HENRY FRANCIS, M.D. 1887, 86 Beacon Street.

SEAVERNS, JOEL, M.D. 1854, 2 Dudley Place, Roxbury.

SHATTUCK, FREDERICK CHEEVER, M.D. 1873, 135 Marlborough Street.

SHATTUCK, GEORGE BRUNE, M.D. 1869, 183 Beacon Street.

SHAW, BENJAMIN SHURTLEFF, M.D. 1850, 28 Marlborough Street.

SHAW, HENRY LYMAN, M.D. 1859, 431 Boylston Street.

SHERMAN, THOMAS FOSTER, M.D. 1881, 25 Rutland Square.

SINCLAIR, ALEXANDER DOULL, M.D. 1857, 35 Newbury Street.

SKINNER, EDWARD MANNING, M.D. 1862, Forest Hills Street, Jamaica Plain.

SMITH, HERBERT LLEWELLYN, M.D. 1887, 571 Tremont Street.
SMITH, JONATHAN JASON, M.D. 1879, 1 Bowdoin Street.
SPEAR, EDMUND DOE, M.D. 1874, 6 Beacon Street.
SPRAGUE, RICHARD, M.D. 1887, Hotel Bristol.
SPRAGUE, RUFUS WILLIAM, M.D. 1871, 407 Main Street, Charlestown.
STANDISH, MYLES, M.D. 1879, 200 Dartmouth Street.
STEDMAN, CHARLES ELLERY, M.D. 1855, 6 Monadnock Street, Dorchester

STEDMAN, GEORGE, M.D. 1875, 110 Newbury Street.
STEDMAN, HENRY RUST, M.D. 1875, Roslindale.
STEVENS, CALVIN, M.D. 1845, 7 East Newton Street.
STEVENS, CHARLES WISTAR, M.D. 1870, 54 Elm Street, Charlestown.
STEVENS, GEORGE BECKWITH, M.D. 1870, 444 Warren Street, Roxbury.

STEVENS, WILLIAM STANFORD, M.D. 1883, 7 East Newton Street. STILL, JAMES THOMAS, M.D. 1871, 27 North Anderson Street. STONE, ARTHUR KINGSBURY, M.D. 1888, 220 Clarendon Street. STONE, CHARLES SINCLAIR, M.D. 1886, Tremont and Weston Streets. STORER, MALCOLM, M.D. 1889, 476 Boylston Street. STREET, CHARLES CARROLL, M.D. 1861, 282 Hanover Street. STRONG, CHARLES PRATT, M.D. 1881, 1 Exeter Street. STUART, FREDERIC WILLIAM, M.D. 1884, 550 Broadway, South Boston. STURGIS, RUSSELL, M.D. 1881, 190 Marlborough Street. SWAN, CHARLES WALTER, M.D. 1864, 79 Worcester Street. SWAN, WILL HOWARD, M.D. 1891, Boston City Hospital. SWEENEY, HILARY TUCKER, M.D. 1889, 305 Havre Street, East Boston. SWIFT, JOHN BAKER, M.D. 1877, 11 Gloucester Street. TALBOT, ISRAEL TISDALE, M.D. 1854, 66 Marlborough Street. TARBELL, GEORGE GROSVENOR, M.D. 1865, 274 Marlborough Street. TEMPLE, WILLIAM FRANKLIN, M.D. 1881, 240 Huntington Avenue. THOMPSON, GEORGE EBEN, M.D. 1884, 301 Shawmut Avenue. THOMPSON, JOHN McQUAID, M.D. 1889, 29 Hollis Street. THORNDIKE, AUGUSTUS, M.D. 1888, 101 Beacon Street. THORNDIKE, PAUL, M.D. 1888, 80 Marlborough Street. THURLOW, JOHN HOWARD, M.D. 1881, 107 Warren Street, Roxbury. TOWNSEND, CHARLES WENDELL, M.D. 1885, 61 Chestnut Street. TRACY, EDWARD ALOYSIUS, M.D. 1891, 99 Broadway, South Boston. TWITCHELL, EDWARD THAYER, M.D. 1886, 35 Alban Street, Dorchester.

UNDERHILL, CHARLES DUDLEY, M.D. 1888, 144 Chandler Street. UNDERWOOD, GEORGE LATHAM, M.D. 1858, 643 Tremont Street. URIE, JOHN FRANCIS, M.D. 1888, U.S. Navy Yard, Charlestown. VICKERY, HERMAN FRANK, M.D. 1882, 268 Beacon Street. WADSWORTH, OLIVER FAIRFIELD, M.D. 1865, 398 Boylston Street. WALKER, MAURICE ANSON, M.D. 1891, Boston Emergency Hospital. WALSH, FRANK WINFIELD, M.D. 1885, 847 Tremont Street. WALTON, GEORGE LINCOLN, M.D. 1880, 199 Marlborough Street. WARDWELL, WILLIAM TECUMSEH SHERMAN, M.D., 1888, Roslindale. WARREN, CHARLES EVERETT, M.D. 1883, 51 Union Park. WARREN, JOHN COLLINS, M.D. 1866, 58 Beacon Street. WASHBURN, GEORGE HAMLIN, M.D. 1886, 313 Marlborough Street. WATERMAN, THOMAS, M.D. 1868, Hotel Ilkley, Huntington Avenue. WATSON, FRANCIS SEDGWICK, M.D. 1879, 80 Marlborough Street. WEBBER, SAMUEL GILBERT, M.D. 1865, 146 Marlborough Street. WEBSTER, GEORGE ARTHUR, M.D. 1889, 708 Tremont Street. WELD, FRANCIS MINOT, M.D. 1864, Storey Place, Jamaica Plain. Wesselhoeft, Conrad, M.D. 1856, 661 Boylston Street. WEST, EDWARD GRAEFF, M.D. 1880, 630 Warren Street, Roxbury. WHEELER, MORRIS PLUMER, M.D. 1874, 741 Dudley Street, Dorchester.

WHITE, HERBERT WARREN, M.D. 1880, 161 Warren Street, Roxbury. WHITE, JAMES CLARKE, M.D. 1856. 259 Marlborough Street. WHITNEY, CHARLES MELVILLE, M.D. 1887, 591 Tremont Street. WHITNEY, WILLIAM FISKE, M.D. 1875, 228 Marlborough Street. WHITRIDGE, ROLAND BARKER, M.D. 1883, Hotel Brunswick. WHITTIER, EDWARD NEWTON, M.D. 1869, 647 Boylston Street. WIGGLESWORTH, EDWARD, M.D. 1865, 188 Beacon Street. WILLIAMS, CHARLES CROSBY, M.D. 1886, Hotel Pelham. WILLIAMS, FRANCIS HENRY, M.D. 1877, 23 Marlborough Street. WILLIAMS, HAROLD, M.D. 1878, 225 Marlborough Street. WILLIAMS, JACOB LAFAYETTE, M.D. 1848, 1 Mt. Vernon Street. WOOD, EDWARD STICKNEY, M.D. 1871, Harvard Medical School. YOUNG, JOHN FRANCIS, M.D. 1879, 129 Broadway, South Boston.

OTHER CITIES AND TOWNS.

ABBE, ALANSON JOSEPH, M.D. 1885, 27 Banks Street, Fall River.

ABBOTT, CHARLES EDWARD, M.D. 1881, 43 Main Street, Andover.

ABBOTT, SAMUEL WARREN, M.D. 1862, Wakefield.

ADAMS, GEORGE EDWIN, M.D. 1880, 939 Main Street, Worcester.

ADAMS, JAMES FOSTER ALLEYNE, M.D. 1866, 26 Wendell Avenue, Pittsfield.

Adams, Zabdiel Boylston, M.D. 1853, Framingham.

Ahearne, Cornelius Augustus, M.D. 1866, Lynn.

Ahearne, Cornelius Augustus, Jr., M.D. 1889, P.O. Box 336, Lynn.

Aldrich, Albert Clinton, M.D. 1883, 329 Broadway, Somerville.

Aldrich, Nathaniel Borden, M.D. 1889, 89 N. Main Street, Fall River.

ALLEN, JUSTIN, M.D. 1856, Topsfield.

AMORY, CHARLES, M.D. 1832, 100 Ellery Street, Cambridge.

ANTHONY, FRANCIS WAYLAND, M D. 1888, Bradford.

ATWOOD, CHARLES AUGUSTUS, M.D. 1883, 7 W. Britannia Street, Taunton.

ATWOOD, FRANK SUMNER, M.D. 1882, 125 Federal Street, Salem. AYER, RICHARD GILBERT, M.D. 1891, 308 Elm Street, West Somervilla

BACON, JONAS EDWARD, M.D. 1878, 101 Main Street, Brockton.
BAKER, DAVID ERASTUS, M.D. 1883, 227 Walnut Street, Newtonville.
BALDWIN, FREDERICK WILLIAM, M.D. 1886, 45 Maple Street, Danvers.
BALL, THOMAS JOSEPH, M.D. 1887, 197 Chestnut Street, Chelsea.
BANCROFT, GEORGE ANDREW, M.D. 1890, South Natick.
BARNES, FRANCIS JOHN, M.D. 1888, 69 Brattle Street, Cambridge.
BARSS, JAMES RICHMOND, M.D. 1873, 442 Main Street, Malden.
BELL, WILLIAM APPLETON, M.D. 1876, 26 Bow Street, Somerville.

BIGELOW, ENOS HOYT, M.D. 1882, Framingham.

BLAKE, HARRISON GRAY, M.D. 1888, Woburn.

BLANCHARD, ALBERT HENRY, M.D. 1851, Sherborn.

BLANCHARD, BENJAMIN SEAVER, M.D. 1882, Davis Avenue, Brookline.

BLODGETT, STEPHEN HASKELL, M.D. 1887, 884 Main Street, Cambridge.

BOOTH, EDWARD CHAUNCEY, M.D. 1877, 40 Boston Street, Somerville.

BORDEN, HENRY FRANCIS, M.D. 1869, 76 High Street, Brockton.

BOWERS, WALTER PRENTICE, M.D. 1879, Clinton.

Breck, Theodore Frelinghuysen, M.D. 1866, 4 Mattoon Street, Springfield.

Brennan, John Joseph, M.D. 1886, 54 Green Street, Worcester.

BRIGHAM, FRANKLIN WHITING, M.D. 1865, Shrewsbury.

Brown, John Peaslee, M.D. 1865, Lunatic Asylum, Taunton.

BRYANT, LEWIS LINCOLN, M.D. 1874, 7 Temple Street, Cambridgeport.

BRYANT, WILLIAM SOHIER, M.D. 1888, Cohasset.

BULLARD, JOHN THORNTON, M.D. 1887, 446 County Street, New Bedford.

BULLOCK, EDWIN WARREN, M.D. 1886, 24 White Street, Haverhill.

BURDETT, GEORGE WASHINGTON, M.D. 1846, 92 Church Street, Clinton.

BURNS, HIRAM HUTCHINS, M.D. 1887, Athol Centre.

BUTLER, WINTHROP, M.D. 1866, Vineyard Haven.

Cahill, Charles Sumner, M.D. 1886, 149 Prospect Street, Cambridgeport.

CARLETON, CHARLES GREENLEAF, M.D. 1867, 301 Essex Street, Lawrence.

CARROLL, THOMAS FRANCIS, M.D. 1888, 389 Washington Street, Newton.

CARRUTHERS, ARCHIBALD KEIGHTLY, M.D. 1872, Rockbottom.

CHANDLER, LUTHER GRAVES, M.D. 1871, Townsend.

CHANDLER, NORMAN FITCH, M.D. 1888, Medford.

CHANNING, WALTER, M.D. 1872, Brookline.

CHASE, HEMAN LINCOLN, M.D. 1887, 180 Washington Street, Brook-LINE.

CHASE, HIRAM LUCE, M.D. 1846, 752 Main Street, Cambridgeport.

CLARK, GEORGE STILLMAN, M.D. 1885, 19 Highland Street, Worcester.

CLARK, JOSEPH EDDY, M.D. 1882, 2 Oakland Street, Medford.

CLARK, LEONARD BROWN, M.D. 1889, Waverly.

CLARK, SIDNEY AVERY, M.D. 1891, 124 Main Street, Northampton.

CLARKE, AUGUSTUS PECK, M.D. 1862, 693 Main Street, Cambridgeport.

CLARKE, MAURICE DWIGHT, M.D. 1882, 81 Main Street, Haverhill.

CLARKE, SAMUEL BARTLETT, M.D. 1880, 8 Chestnut Street, Salem.

CLEAVES, JAMES EDWIN, M.D. 1879, 8 Salem Street, Medford.
CLEMENT, GEORGE COLBURN, M.D. 1880, Summer Street, Haverhill.
CLOUGH, BRNJAMIN FRANKLIN, M.D. 1869, 46 Austin Street, Worcester.

COGGIN, DAVID, M.D. 1868, 7 Chestnut Street, Salem.

Cogswell, Edward Russell, M.D. 1867, 61 Kirkland Street, Cambridge.

COLLINS, ORVILLE WILLIAM, M.D. 1887, South Framingham.

COLT, HENRY, M.D. 1881, P.O. Box 1264, Pittsfield.

COMEY, PERLEY PIERCE, M.D. 1878, 91 Church Street, Clinton.

CONLAN, THOMAS, M.D. 1887, 204 Main Street, Brockton.

CONNELL, ARTHUR IRVING, M.D. 1890, 281 S. Main Street, Fall River.

COOPER, CHARLES WENDELL, M.D. 1877, 136 Main Street, Northampton.

COPELAND, HORATIO FRANKLIN, M.D. 1865, 144 Washington Street, Whitman.

CORNISH, ELLIS HOLMES, M.D. 1867, Carver.

COUCH, JOHN FRANCIS, M.D. 1872, 42 Bow Street, Somerville.

COUCH, JOSEPH DANIEL, M.D. 1883, 762 Main Street, Cambridgeport.

COWLES, WILLIAM NORMAN, M.D. 1887, Ayer.

CRAWFORD, JOHN WILLIAM, M.D. 1867, 361 Haverhill Street, Lawrence.

CREHORE, CHARLES FREDERIC, M.D. 1859, Newton Lower Falls.
CROCKER, JOHN MYRICK, M.D. 1866, 321 Broadway, Cambridgeport.
CUNNINGHAM, THOMAS EDWARD, M.D. 1883, 705 Main street, Cambridgeport.

CUTLER, EDWARD ROLAND, M.D. 1863, 716 Main Street, Waltham.
CUTTER, EDWARD JONES, M.D. 1881, 15 Pearl Street, Leominster.
CUTTER, JOHN CLARENCE, M.D. 1877, 406 Main Street, Worcester.
CUTTS, HABRY MADISON, M.D. 1883, Longwood Avenue, Brookline.
DANFORTH, WILLIAM HENRY, M.D. 1886, 40 Leicester Street, Worces-

ter.

Davis, Nathan Johnson, M.D. 1871, 75 Pearl Street, Somerville.

De Land, Charles Airmet, M.D. 1885, Warren.

Dean, Edgar Everett, M.D. 1861, 81 Green Street, Brockton.

Dearing, Thomas Haven, M.D. 1861, Braintree.

Deroin, Francis Xavier, M.D. 1883, 98 Dwight Street, Chicopee.

Donahoe, Hugh, M.D. 1888, 200 Winter Street, Haverhill.

Donavan, Henry Vincent, M.D. 1891, 165 S. Broadway, Lawrence.

Dow, George William, M.D. 1881, 335 Broadway, Lawrence.

Drew, Frank Haynes, M.D. 1882, Shelburne Falls.

Driver, Stephen William, M.D. 1863, 5 Farwell Place, Cambridge.

Dudley, Henry Watson, M.D. 1864, Abington.

Durant, Charles Edwin, M.D. 1885, 5 Grand Street, Haverhill.

DURELL, THOMAS MOULTON, M.D. 1879, 23 Bow Street, Somerville.

DUTTON, CHARLES, M.D. 1863, Tyngsborough.

DWELLY, JEROME, M.D. 1847, 21 Rocks Street, Fall River.

EATON, JOHN MARSHALL, M.D. 1856, Milford.

ELA, WALTER, M.D. 1875, 62 Brattle Street, Cambridge.

ELLIOT, EDWARD PEARSON, M.D. 1882, Lunatic Hospital, Danvers.

ELLIS, FREDERIC WARREN, M.D. 1881, Monson.

ELLIS, GEORGE LIVINGSTON, M D. 1872, Middleboro.

EVERETT, WILLARD SHEPARD, M.D. 1864, P.O. Box 1175, Hyde Park.

FALLON, MICHAEL FRANCIS, M.D. 1887, 49 Park Street, Worcester.

FARLOW, WILLIAM GILSON, M.D. 1870, Cambridge.

FAUNCE, ROBERT HARRIS, M.D. 1882, Sandwich.

FENWICK, JOSEPH BENSON, M.D. 1872, Chelsea.

FESSENDEN, GEORGE RUSSELL, M.D. 1879, Ashfield.

FIELD, CHARLES ELMER, M.D. 1878, East Bridgewater.

FIELD, JAMES BRAINERD, M.D. 1884, 243 Westford Street, Lowell.

FINNIGAN, PATRICK JOSEPH, M.D. 1883, 361 Cambridge Street, East Cambridge.

FISKE, EUSTACE LINCOLN, M.D. 1886, 22 Pritchard Street, Fitchburg. FITZ, GEORGE WELLS, M.D. 1891, Cambridge.

Folsom, Norton, M.D. 1864, 19 Berkeley Street, Cambridge.

FOSTER, CHARLES CHAUNCEY, M.D. 1883, 5 Riedesel Avenue, Cambridge.

Fox, WILLIAM YALE, M.D. 1888, 82 Broadway, Taunton.

Francis, George Ebenezer, M.D. 1863, 79 Elm Street, Worcester.

FRANCIS, GEORGE HILLS, M.D. 1887, Davis Avenue, Brookline.

FRANCIS, TAPPAN EUSTIS, M.D. 1847, Brookline.

Francois, Edward Albert Louis, M.D. 1866, Saugus.

FRENCH, GEORGE MORRILL, M.D. 1884, Salem and Park Streets, Malden.

FULLER, DANIEL HUNT, M.D. 1889, McLean Asylum, Somerville.

GAGE, HOMER, M.D. 1887, 50 Pearl Street, Worcester.

GAGE, JAMES ARTHUR, M.D. 1885, 48 Central Street, Lowell.

GAGE, THOMAS HOVEY, M.D. 1852, Worcester.

GALLOUPE, ISAAC FRANCIS, M.D. 1849, 13 Park Street, Lynn.

GARDNER, GUY HUBBARD, M.D. 1879, Winchester.

GARLAND, JOSEPH EVERETT, M.D. 1877, 13 Pleasant Street, Gloucester.

GEROULD, JOSEPH BOWDITCH, M.D. 1881, North Attleboro.

GIFFORD, JOHN HENRY, M.D. 1884, 28 Locust Street, Fall River.

GILBERT, JOHN HENRY, M.D. 1853, 188 Hancock Street, Quincy.

GILMAN, WARREN RANDALL, M.D. 1888, Worcester.

GOLDSMITH, CHARLES ALMON, M.D. 1869, Methuen.

GOODELL, GEORGE ZINA, M.D. 1881, 12 St. Peter Street, Salem.

GOODWIN, RICHARD JAMES PLUMER, M.D. 1865, 481 Pleasant Street,

GORDON, JOHN ALEXANDER, M.D. 1871, 209 Hancock Street, Quincy.

GORDON, STEPHEN MASURY, M.D. 1885, 41 Rock Street, Fall River.

GOULD, CLARKE STORER, M.D. 1888, Norwood.

GOULD, LAWRENCE MIRVIN, M.D. 1877, 16 Neponset Block, Hyde Park.

GRAY, CHARLES HENRY, M.D. 1891, 5 Columbia Street, Cambridgeport. GREELEY, Moses Reuben, M.D. 1850, 18 Pleasant Street, South Wey-

GREENLEAF, RICHARD CRANCH, M.D. 1870, Lenox.

GREENWOOD, ALLEN, M.D. 1889, 103 Moody Street, Waltham.

GREENWOOD, SEWELL ELLIOTT, M.D. 1877, Templeton.

GRIFFIN, ARTHUR GEORGE, M.D. 1883, 195 Pleasant Street, Malden.

HADDOCK, CHARLES WHITNEY, M.D. 1879, 14 Bartlett Street, Beverly.

HALE, JOSIAH LITTLE, M.D. 1868, Chestnut Hill Avenue, Brookline.

Handy, Benjamin Jones, M.D. 1871, 37 Rock Street, Fall River.

HANSCOM, SANFORD, M.D. 1868, Webster Street, East Somerville.

HARRINGTON, THOMAS FRANCIS, M.D. 1888, 115 Bridge Street, Lowell.

HARROWER, DAVID, JR., M.D. 1884, 9 Elm Street, Worcester.

HARVEY, EDWIN BAYARD, M.D. 1866, Westborough.

HASTINGS, JOSEPH WILCOX, M.D. 1856, Warren.

HAYES, STEPHEN WILLIAM, M.D. 1870, 149 Middle Street, New Bedford.

HAYES, THOMAS JOSEPH, M.D. 1887, 264 Cabot Street, Beverly.

HAZLETON, ISAAC HILLS, M.D. 1861, Wellesley Hills.

HILLS, WILLIAM BARKER, M.D. 1874, 27 Everett Street, Cambridge.

Hodgdon, Andrew Hall, M.D. 1883, Dedham.

HOLBROOK, WILLIAM EDWARD, M.D. 1879, 79 North Common Street, Lynn.

HOLDEN, CHARLES SUMNER, M.D. 1883, Attleboro.

HOLMES, HOWLAND, M.D. 1848, Lexington.

HOLMES, JOHN PARKER, M.D. 1887, Milford.

HOLT, EDWARD BROWN, M.D. 1868, 17 Central Block, Lowell.

HOLYOKE, FRANK, M.D. 1883, 187 Walnut Street, Holyoke.

HOMER, JOHN, M.D. 1865, 156 High Street, Newburyport.

HOOKER, CHARLES PARKER, M.D. 1879, 183 State Street, Springfield.

HOOKER, EDWARD DWIGHT, M.D. 1884, 12 Pleasant Street, Arlington.

HOSMER, CHARLES EDWARD, M.D. 1867, South Billerica.

HOWARD, HERBERT BURR, M.D. 1884, State Almshouse, Tewksbury.

Howe, Francis Augustine, M.D. 1854, Newburyport.

Howe, OLIVER HUNT, M.D. 1886, Cohasset.

HUBBARD, CHARLES THACHER, M.D. 1861, 102 Main Street, Taunton.

HUNT, WILLIAM OTIS, M.D. 1877, Newtonville.

HUNTING, NATHANIEL STEVENS, M.D. 1889, 209 Hancock Street, Onincy.

HUSE, RALPH CROSS, M.D. 1866, Georgetown.

JACK, ERNEST SANFORD, M.D. 1886, 6 West Emerson Street, Melrose.

JACKSON, WILLIAM BENJAMIN, M.D. 1880, 119 Gorham Street, Lowell.

Jaques, Henry Percy, M.D. 1880, Milton.

Jarvis, William Furness, M.D. 1880, 238 Moody Street, Waltham.

Jefferson, Herbert Perry, M.D. 1880, P.O. Box 144, Lowell.

Johnson, Amos Howe, M.D. 1865, 26 Winter Street, Salem.

Johnson, William Louis, M.D. 1878, Uxbridge.

Jones, George Warren, M.D. 1872, 734 Main Street, Cambridgeport.

Jones, Gilbert Norris, M.D. 1888, 42 Middle Street, Gloucester.

Jordan, George Albert, M.D. 1872, 46 Myrtle Street, Worcester.

Keith, Wallace Cushing, M.D. 1884, 238 North Main Street, Brockton.

Kelley, George Wallace, M.D. 1878, Barnstable.

Kemble, Laurence Grafton, M.D. 1883, 57 Federal Street, Salem.

Kennedy, Frederick William, M.D. 1883, 30 Andover Street, Lawrence.

KILBY, HENRY SHERMAN, M.D. 1878, North Attleboro.
KILROY, PHILIP, M.D. 1888, 137½ State Street, Springfield.
KING, WILLIAM RUFUS, M.D. 1890, 51 Nahant Street, Lynn.
KITTBEDGE, JOSEPH, M.D. 1880, Davis Avenue, Brookline.
LATIMER, JAMES ABERCROMBIE, M.D. 1873, 57 Otis Street, East Cambridge.

LEACH, WILLIAM, M.D. 1856, Vineyard Haven.

LEITCH, JOHN ALVIN, M.D. 1887, Andover.

LINCOLN, JACOB READ, M.D. 1888, Millbury.

LITCHFIELD, WILLIAM HARVEY, M.D. 1882, Hull.

LOCKE, HORACE MANN, M.D. 1886, 1106 Main Street, Brockton.

LOMBARD, WARREN PLIMPTON, M.D. 1882, Clark University, Worcester.

LORING, ROBERT PEARMAIN, M.D. 1875, Newton Centre.
LOVEJOY, CHARLES AVERILL, M.D. 1872, 62 Broad Street, Lynn.
LYONS, HERBERT HENRY, M.D. 1881, 6 Pritchard Street, Fitchburg.
MACK, WILLIAM, M.D. 1838, P.O. Box 224, Salem.
MACKIN, CHARLES, M.D. 1866, 10 Congress Street, Milford.
MACPHERSON, FREDERIC WILLIAM, M.D. 1871, P.O. Box 14, Swampscott.

MAHONEY, JOHN BERNARD, M.D. 1887, 42 Salem Street, Medford.

MAHONEY, JOHN FRANCIS, M.D. 1887, 182 Chestnut Street, Chelsea.

MAHONEY, STEPHEN ANDREW, M.D. 1889, 231 High Street, Holyoke.

MANSFIELD, HENRY TUCKER, M.D. 1869, Highland Avenue, Needham.

MANSFIELD, JOHN ROBBINS, M.D. 1859, 21 Crescent Street, Wakefield.

MARTIN, STEPHEN CROSBY, M.D. 1874, Park Street, Brookline.

MAYNARD, JOHN PARKER, M.D. 1848, P.O. Box 76, Dedham.

MCCARTHY, EUGENE ALLAN, M.D. 1887, 512 Main Street, Cambridge-port.

McCarthy, Thomas Horatio, M.D. 1890, North Easton. McCarty, James Joseph, M.D. 1878, Lowell.



McClean, George Chesley, M.D. 1875, 337 State Street, Springfield. McCormick, Cornelius Joseph, M.D. 1876, 26 Common Street, Waltham.

McMann, John Joseph, M.D. 1867, 148 South Common Street, Lynn. McOwen, Timothy Edward, M.D. 1885, 88 South Street, Lowell.

McOwen, William Henry, M.D. 1883, 100 Chestnut Avenue, Newton Upper Falls.

MEAD, GEORGE NATHANIEL PLUMER, M.D. 1886, 186 Chelsea Street, Everett.

MEAD, JULIAN AUGUSTUS, M.D. 1881, Watertown.

MEADER, CHARLES EUGENE, M.D. 1879, 311 Essex Street, Lynn.

MILLET, CHARLES SUMNER, M.D. 1880, Webster Street, Rockland.

MILLS, GEORGE WESTGATE, M.D. 1879, 24 Salem Street, Medford.

MORRIS, JAMES STEWART, M.D. 1888, Crescent Beach, Revere.

MORSE, CHARLES FRANCIS, M.D. 1889, 195 Chestnut Street, Chelsea.

MOULTON, BENJAMIN FRANCIS, M.D. 1867, 124 South Broadway, Lawrence.

MURPHY, DANIEL FRANCIS, M.D 1887, 44 Pleasant Street, Woburn.

MURPHY, JOSEPH BRIGGS, M.D. 1883, 23 Summer Street, Taunton.

NASH, GEORGE WILLIAM, M.D. 1884, 23 Trowbridge Street, Cambridge.

NELSON, SAMUEL NEWELL, M.D. 1882, 18 Beach Street, Revere.

NEWHALL, HERBERT WILLIAM, M.D. 1884, 41 Baltimore Street, Lynn.

NICHOLS, CHARLES LEMUEL, M.D. 1875, 61 Pearl Street, Worcester.

NICHOLS, JOHN TAYLOR GILMAN, M.D. 1859, 63 Brattle Street, Cambridge.

NORFOLK, WALTER JENKS, M.D. 1873, 29 Grove Street, Chicopee Falls. NORRIS, ALBERT LANE, M.D. 1865, 674 Main Street, Cambridgeport.

NORWOOD, EPHRAIM WOOD, M.D. 1882, Spencer.

NOTTAGE, HERBERT PIERCY, M.D. 1886, Westport.

NOYES, FRANCIS VERGNIES, M.D. 1831, Billerica.

NOYES, WILLIAM, M.D. 1885, McLean Asylum, Somerville.

O'CONNELL, JOHN DAVID, M.D. 1876, 186 Lake View Avenue, Cambridge.

O'CONNOR, JOHN JAMES, M.D. 1888, 112 Dwight Street, Holyoke.

O'Donnell, Francis Michael, M.D. 1887, Washington Street, Newton.

OLIVER, JAMES, M.D. 1862, Athol Centre.

OSBORNE, GEORGE STERNE, M.D. 1863, Peabody.

OSGOOD, GEORGE COWLES, M.D. 1866, Lowell.

PAGE, CHARLES WHITNEY, M.D. 1870, Danvers.

PALMER, LEWIS MERRITT, M.D. 1881, South Framingham.

Parsons, Azariah Worthington, M.D. 1880, Athol.

Parsons, John Eleaser, M.D. 1863, 6 Grove Street, Ayer.

PAUL, WALTER EVERARD, M.D. 1887, Southbridge.

Peirce, Warren, M.D. 1869, Plymouth.

Peirson, Edward Lawrence, M.D. 1888, 13 Barton Square, Salem. Pelton, Clarence Whitfield, M.D. 1890, Lunatic Hospital, Worcester.

Perkins, Thomas Lyman, M.D. 1880, 800 Essex Street, Salem.

PHIPPEN, HARDY, M.D. 1889, Salem, Mass.

PHIPPS, WALTER ANDRUS, M.D. 1878, Hopkinton.

PIERCE, GARDNER CARPENTER, M.D. 1866, Ashland.

PIERCE, MATTHEW VASSAR, M.D. 1880, Milton.

PLIMPTON, LEWIS HENRY, M.D. 1879, Norwood.

POMEROY, WILLIAM HENRY, M.D. 1886, 201 State Street, Springfield.

PORTER, FRANCIS EDWARD, M.D. 1873, Auburndale, Newton.

PREBLE, WALLACE, M.D. 1883, 22 Appian Way, Cambridge.

PRESBREY, SILAS DEAN, M.D. 1865, Weir Street, Taunton.

PRIOR, CHARLES EDWIN, M.D. 1882, 310 Main Street, Malden.

QUIMBY, ELISHA HERVEY, M.D. 1863, 72 High Street, Malden.

QUIMBY, SAMUEL FOSTER, M.D. 1864, 48 Federal Street, Salem.

QUINCY, HENRY PARKER, M.D. 1867, Dedham.

QUINT, NORMAN PERKINS, M.D. 1870, West Medway.

RICE, CHARLES HENRY, M.D. 1866, Fitchburg.

RICHARDSON, WILLIAM SHEDD, M.D. 1884, 8 Cotting Avenue, Marlboro.

RIPLEY, FREDERICK JEROME, M.D. 1883, Brockton.

ROBBINS, JAMES HENRY, M.D. 1867, Hingham.

ROSE, DANIEL CAMPBELL, M.D. 1869, Stoughton.

RYDER, GODFREY, M.D. 1880, Malden.

SABINE, GEORGE KRANS, M.D. 1873, Brookline.

SAUNDERS, LEVI, M.D. 1857, Lanesville, Gloucester.

SAWYER, BENJAMIN ADDISON, M.D. 1865, 50 Chestnut Street, Haver-

SAWYER, FREDERIC AUGUSTUS, M.D. 1856, Wareham.

SCANNELL, MICHAEL EDWARD M.D. 1891, 89 Saratoga Street, Lawrence.

SHACKFORD, CHARLES HARRISON, M.D. 1849, 207 Shurtleff Street,

SHEA, ANDREW FRANCIS, M.D. 1882, 26 Bradford Street, Lawrence.

SHELDON, CHAUNCEY COOLEY, M.D. 1877, 49 North Common Street, Lynn.

SHERMAN, FRANK MORTON, M.D. 1881, Newton Lower Falls.

SHURTLEFF, AUGUSTINE, M.D. 1849, High Street, Brookline.

SLADE, DANIEL DENISON, M.D. 1848, Chestnut Hill.

SOUTHER, WILLIAM TOWLE, M.D. 1878, 1 Lincoln Square, Worcester.

SPALDING, CHARLES PARKER, M.D. 1877, 485 Middlesex Street, Lowell.

SPOONER, JOHN WINTHROP, M.D. 1871, Hingham.

SPRING, CLARENCE WALTER, M.D. 1884, 2 Crescent Street, Fitchburg.

STEVENS, ANDREW JACKSON, M.D. 1869, 517 Main Street, Malden.

STEVENS, EDMUND HORACE, M.D. 1867, 162 North Avenue, North Cambridge.

STICKNEY, GEORGE AUGUSTUS, M.D. 1882, Beverly.

STOCKER, ALFRED AUGUSTUS, M.D. 1853, 13 Prospect Street, Cambridgeport.

STONE, LINCOLN RIPLEY, M.D. 1854, 131 Vernon Street, Newton.

SULLIVAN, JOHN LANGDON, M.D. 1849, 310 Main Street, Malden.

SWAN, WILLIAM DONNISON, M.D. 1885, 167 Brattle Street, Cambridge.

SWAN, WILLIAM ELLERY CHANNING, M.D. 1865, Stoughton.

SWIFT, WILLIAM NYE, M.D. 1881, New Bedford.

Symonds, Benjamin Ropes, M.D. 1883, 52 Washington Street, Salem.

TAYLOR, CHARLES WARREN, M.D. 1884, 4 and 5 Mitchell Block, Lowell.

TAYLOR, FREDERIC WESTON, M.D. 1882, 134 North Avenue, North Cambridge.

TERBY, CHARLES CHURCH, M.D. 1884, 87 North Main Street, Fall River.

THAYER, FREDERICK LYMAN, M.D. 1871, West Newton.

THISSELL, JOSEPH ABBOTT, M.D. 1885, Beverly.

THOMAS, FLAVEL SHURTLEFF, M.D. 1874, P.O. Box 14, Hanson.

THOMPSON, FREDERICK HENRY, M.D. 1870, 3 Pleasant Street, Fitchburg.

TINEHAM, GRANVILLE WILSON, M.D. 1871, 4 Front Street, Weymouth.

TITCOMB, GEORGE EUGENE, M.D. 1881, Concord.

Tower, Charles Bates, M.D. 1881, 1 Waterhouse Street, Cambridge.

Tower, Charles Carroll, M.D. 1859, South Weymouth.

Townsend, George James, M.D. 1846, South Natick.

TUCKERMAN, FREDERICK, M.D. 1882, Amberst.

TUPPER, AUGUSTUS MACLAUCHLAN, M.D. 1870, Rockport.

TUTTLE, ALBERT HENRY, M.D. 1886, 731 Main Street, Cambridgeport.

TUTTLE, GEORGE THOMAS, M.D. 1878, McLean Asylum, Somerville.

TWITCHELL, GEORGE PIERCE, M.D. 1882, Greenfield.

UTLEY, EDWARD ROSWELL, M.D. 1891, Newton.

VAUGHAN, CHARLES EVERETT, M.D. 1863, 8 Garden Street, Cambridge. VILES, CLARENCE ALBERT, M.D. 1878, Wyman's Exchange, Lowell.

WALKER, AUGUSTUS CHAPMAN, M.D. 1866, Greenfield.

WALSH, EDMUND, M.D. 1873, 462 Cambridge Street, East Cambridge.

WARD, ROLLIN CLAYTON, M.D. 1870, Northfield.

WEBBER, ALONZO CARTER, M.D. 1849, 777 Main Street, Cambridgeport.

WEBBER, FREDERICK WARD, M.D. 1879, 430 Centre Street, Newton.

WEBBER, GEORGE CLARK, M.D. 1863, Millbury.

WEIL, FRANK EDWARD, M.D. 1882, North Andover Depot.

WELLINGTON, WILLIAM WILLIAMSON, M.D. 1838, Cambridgeport.

WESSELHOEFT, WALTER, M.D. 1859, 391 Harvard Street, Cambridge.

WETHERBEE, ROSWELL, M.D. 1882, 520 Main Street, Cambridgeport.

WETHERELL, ARTHUR BRYANT, M.D. 1883, 234 Maple Street, Holyoke.

WHEELER, LEONARD, M.D. 1870, 130 Main Street, Worcester.

WHISTON, EDWARD ANDERM, M.D. 1861, Highland Ave., Newtonville.

WHITAKER, JOHN BIRTWISTLE, M.D. 1867, 6 Cottage Street, Fall River.

WHITE, EMORY LINCOLN, M.D. 1872, 30 Bow Street, Somerville.

WHITMORE, LORENZO LOCKE, M.D. 1851, North Ashburnham.

WHITTEMORE, FREDERIC WEBSTER, M.D. 1878, 39 Brattle Street, Cambridge.

WILBUR, HUBERT GRANVILLE, M.D. 1890, 93 N. Main Street, Fall River.

WILLIS, JOHN WARREN, M.D. 1861, Waltham.

WILLIS, REUBEN, M.D. 1867, 285 Broadway, Somerville.

WILMARTH, FREDERICK AUGUSTUS, M.D. 1888, Exchange Block, Milford.

WINN, CHARLES HENRY, M.D. 1888, 15 Thompson Street, Winchester.

WINSLOW, KENELM, M.D. 1891, Centre Street, Newton.

WOOD, ALBERT, M.D. 1862, 67 Pleasant Street, Worcester.

WOOD, HENRY AUSTEN, M.D. 1883, 742 Main Street, Waltham.

WOODBURY, GEORGE FRANKLIN, M.D. 1882, 40 Pleasant Street, Worcester.

WOODBURY, LOUIS AUGUSTUS, M.D. 1872, Elm Park, Groveland.

WOODMAN, WALTER, M.D. 1888, 64 Sparks Street, Cambridge.

WOODWARD, LEMUEL Fox, M.D. 1882, 52 Pearl Street, Worcester.

WOODWARD, SAMUEL BAYARD, M.D. 1878, 58 Pearl Street, Worcester.

WORCESTER, ALFRED, M.D. 1883, 742 Main Street, Waltham.

WORCESTER, CHARLES POMEROY, M.D. 1888, Newtonville.

WYMAN, SAMUEL EDWIN, M.D. 1879, 2 Mt. Auburn Street, Cambridge.

MICHIGAN.

Browne, Henry Wheelock, M.D. 1856, Hubbardston.
GILMARTIN, PETER PAUL, M.D. 1865, 228 Alfred Street, Detroit.
Manton, Walter Porter, M.D. 1881, 83 Lafayette Avenue, Detroit.
Peterson, Reuben, M.D. 1889, Munroe Street, Grand Rapids.
Stockwell, Charles Bliss, M.D. 1878, Port Huron.
Towar, George Washington, Jr., M.D. 1858, 92 Ledyard Street, Detroit.

MINNESOTA.

BARTLETT, CYRUS KILLAM, M.D. 1852, Hospital for Insane, St. Peter. Cockburn, John Cassilis, M.D. 1872, 210 Central Avenue, Minneapolis.

CRAFTS, LEO MELVILLE, M.D. 1890, 28 Syndicate Block, Minneapolis. DENNY, CHARLES FREDERIC, M.D. 1882, 154 E. 7th Street, St. Paul. FOSTER, BURNSIDE, M.D. 1886, Germania Bank Building, St. Paul. FRENCH, GEORGE FRANKLIN, M.D. 1862, 1600 Hawthorne Avenue, Minneapolis.

HOLMES, HENRY ELMER, M.D. 1885, 608 Nicollet Avenue, Minneapolis. Putney, George Ellis, M.D. 1876, Royalton.

WHEATON, CHARLES AUGUSTUS, M.D. 1877, 326 Wabasha Street, St. Paul.

WHEATON, ROBERT ARCHIBALD, M.D. 1890, 326 Wabasha Street, St. Paul.

MISSOURI.

BRIGGS, CHARLES EDWARD, M.D. 1856, 2747 Olive Street, St. Louis. FICHTENEAM, HARRY LAMARTINE, M.D. 1869, 1933 Lynch Street, St. Louis.

GREEN, JOHN, M.D. 1866, 2670 Washington Avenue, St. Louis.
PECKHAM, CYRUS TRACY, M.D. 1879, P. A. Surgeon, Marine Hospital,
St. Louis.

Perkins, John Walter, M.D. 1886, 1109 Broadway, Kansas City. Stevens, Lewis Tebbetts, M.D. 1887, 327 N. Jefferson Street, St. Louis.

TALBOT, AMBROSE, M.D. 1885, Rialto Building, Kansas City. WILSON, CHARLES ALONZO, M.D. 1869, 2841 Gamble Street, St. Louis.

MONTANA.

LEAVITT, ERASMUS DARWIN, M.D. 1870, Butte. PICEMAN, HERSY DERBY, M.D. 1868, Dillon.

NEW HAMPSHIRE.

MANCHESTER.

Aldrich, Ezra Barnes, M.D. 1868, 84 Ash Street.
Boutwell, Henry Thatcher, M.D. 1870, 951 Elm Street.
Boutwell, Henry Winslow, M.D. 1882, 7 Hanover Street.
Carvelle, Henry De Wolfe, M.D. 1878, 961 Elm Street.
Lyons, William Henry Aloysius, M.D. 1890, 5 Pembroke Building.
Robinson, John Franklin, M.D. 1886, 610 Union Street.
Robinson, John Lombard, M.D. 1859, 610 Union Street.
Straw, Amos Gale, M.D. 1890, 3 Cilley Block.
Walker, James Parker, M.D. 1856, 63 Main Street.

mouth.

OTHER CITIES AND TOWNS.

BANCROFT, CHARLES PARKER, M.D. 1878, Concord. BLAISDELL, GEORGE CLARK, M.D. 1867, Contoocook. BURNS, ROBERT, M.D. 1879, Plymouth. CHASE, WILLARD DUNLAP, M.D. 1866, Peterborough. FAULENER, HERBERT KIMBALL, M.D. 1885, 78 West Street, Keene. Goss, Ossian Wilbur, M D. 1882, Lake Village. HAMMOND, CHARLES BARTLETT, M.D. 1880, 182 Main Street, Nashua. HOLCOMBE, CHARLES HENRY, M.D. 1886, Brookline. HYLAND, JESSE BURDETTE, M.D. 1884, 10 Centre Street, Keene. JARVIS, LEONARD, M.D. 1882, Claremont. KIMBALL, GEORGE MORRILL, M.D. 1884, 266 N. Main Street, Concord. LARABEE, GEORGE HERMAN, M.D. 1864, Suncook. MARSTON, ENOCH QUIMBY, M.D. 1876, Sandwich Centre. MOFFETT, FRANK TIFFT, M.D. 1870, Littleton. NELSON, DAVID BATCHELDER, M.D. 1849, Laconia. OSGOOD, GEORGE EDWARD, M.D. 1887, East Barrington. PARSONS, JOHN WILLIAM, M.D. 1865, 5 Chestnut Street, Portsmouth. PRESTON, JOSEPH WILLIAM, M.D. 1850, Great Falls. SHERBURNE, ANDREW BADGER, M.D. 1871, 34 Islington Street, Portsmouth. SWEENY, HENRY LEE, M.D. 1882, Kingston. WADE, EDRIC ALLAN, M.D. 1879, Salem Depot. WHITTIER, SAMUEL CROOK, M.D. 1862, 87 Congress Street, Ports-

NEW JERSEY.

Francis, Richard Pearce, M.D. 1888, 59 Valley Road, Montclair. Taylor, Edward Wyllys, M.D. 1891, Walden Place, Montclair.

NEW YORK.

NEW YORK CITY.

BLODGETT, FRANK MARCELLUS, M.D. 1870, 1286 Broadway. BRANNAN, JOHN WINTERS, M.D. 1878, 54 W. 11th Street. BROWN, DILLON, M.D. 1885, 102 E. 57th Street. CARNEY, SYDNEY HOWARD, M.D. 1861, 201 W. 55th Street. CHASE, GEORGE THORNDIKE, M.D. 1885, 236 W. 127th Street. COE, HENRY CLARK, M.D. 1881, 27 E. 64th Street. COGGESHALL, HENRY TISDALE, M.D. 1883, 102 E. 57th Street. COLEY, WILLIAM BRADLEY, M.D. 1888, 18 E. 32d Street.

CUTTER, EPHRAIM, M.D. 1856, 1730 Broadway.

DANIELS, FRANK HERBERT, M.D. 1884, 126 W. 126th Street.

DENTON, MYRON PRESTON, M.D. 1887, 33 E. 38d Street.

DERBY, RICHARD HENRY, M.D. 1867, 9 W. 85th Street.

FISHER, CHESTER IRVING, M.D. 1570, Superintendent Presbyterian Hospital.

Fise, Arthur Lyman, M.D. 1889, 11 W. 50th Street.

Fuller, Eugene, M.D. 1884, 109 E. 34th Street.

Gibson, Charles Langdon, M.D. 1889, St. Luke's Hospital.

Grandin, Egbert Henry, M.D. 1880, 36 E. 58th Street.

Guiteras, Ramon, M.D. 1883, 107 W. 54th Street.

Heydecker, Henry Reading, M.D. 1889, Central Park West and 75th Street.

Heywood, George, M.D. 1887, 27 W. 31st Street.

Lilienthal, Howard, M.D. 1887, 33 E. 31st Street.

Lincoln, Rufus Pratt, M.D. 1868, 22 W. 31st Street.

Miller, George Norton, M.D. 1882, 39 5th Avenue.

Morton, William James, M.D. 1872, 19 E. 28th Street.

Perry, John Gardner, M.D. 1863, 48 E. 34th Street.

Ruppanner, Anthony, M.D. 1857, 251 5th Avenue, cor. E. 28th Street.

Sturgis, Frederic Russell, M.D. 1867, 16 W. 32d Street.

Tuck, Henry, M.D. 1867, 346 Broadway.

Walton, Alfred, M.D. 1879, 280 4th Avenue.

Whitman, Royal, M.D. 1882, 126 W. 59th Street.

OTHER CITIES AND TOWNS.

Babin, Hosea John, M.D. 1866, Navy Yard, Brooklyn.
Boyden, Frank Edward, M.D. 1885, 622 Marcy Avenue, Brooklyn.
Brown, Charles William M., M.D. 1876, 311 Baldwin Street, Elmira.
Dewey, Charles Ayrault, M.D. 1880, 78 S. Fitzhugh Street, Rochester.
Dunnam Carroll, M.D. 1887, Invinctor on Hudson

Dunham, Carroll, M.D. 1887, Irvington on Hudson.

Dunham, Theodore, M.D. 1888, Irvington on Hudson.

Foster, Hubbard Augustus, M.D. 1871, 3 St. John's Place, Buffalo.

Gardner, Edwin Fisher, M.D. 1875, Fort Porter, Buffalo.

Harrington, Frank Abram, M.D. 1887, 31 Franklin Street, Buffalo.

Hastings, Daniel Gott, M.D. 1888, 49 Park Avenue, Rochester.

Hun, Henry, M.D. 1879, 149 Washington Avenue, Albany.

Kaufman, Franklin John, M.D. 1887, Syracuse.

Keyes, Henry Mitchell, M.D. 1870, P.O. Box 249, Stapleton.

Lincoln, David Francis, M.D. 1864, Main Street, Geneva.

Porteous, James George, M.D. 1866, 255 Mill Street, Poughkeepsie.

Robbins, Nathaniel Alden, M.D. 1864, 94 Pineapple Street, Brooklyn.

SEYMOUR, WILLIAM WOTKYNS, M.D. 1878, 105 8d Street, Troy.
SHATTUCK, HENRY PERKINS, M.D. 1866, 931 Gates Street, Brooklyn.
THAYER, WILLIAM HENRY, M.D. 1844, 171 Livingstone Street, Brooklyn.

WILBUR, JOSHUA GREEN, M.D. 1862, 544 Washington Avenue, Brooklyn.

YOUNG, CHARLES DEAN, M.D. 1890, 31 Caledonia Avenue, Rochester.

NORTH CAROLINA.

BALLARD, ALBERT MANLEY, M.D. 1868, Asheville.

OHIO.

ALLEN, DUDLEY PETER, M.D. 1880, 278 Prospect Street, Cleveland.
BELL, READ LETTS, M.D. 1876, 348 S. Limestone Street, Springfield.
BROOKS, STEPHEN DRIVER, M.D. 1882, Government Building, Cleveland.

TRACY, WILLIAM CLINTON, M.D. 1866, 418 Segur Street, Toledo. WALKER, JOHN BALDWIN, M.D. 1888, 166 Euclid Avenue, Cleveland.

OREGON.

CARLL, WALTER EDWARD, M.D. 1885, Oregon City.

PARKER, SCOLLAY, M.D. 1866, 67 N. 3d Street, Portland.

TUCKER, ERNEST FANNING, M.D. 1884, Marquam Block, Portland.

PENNSYLVANIA.

DAVIS, SUMNER DANFORTH, M.D. 1869, Jermyn.

EATON, PERCIVAL JAMES, M.D. 1888, Corner N. Hiland Avenue and
Broad Street, Pittsburg, E. E.

FINN, WILLIAM HENRY, M.D. 1863, 627 N. 10th Street, Philadelphia.

HOLDEN, FRANCIS MARION, M.D. 1884, Philadelphia.

RHODE ISLAND.

PROVIDENCE.

CARVER, RUFUS HERBERT, M.D. 1870, 33 Aborn Street. Collins, George Lewis, M.D. 1879, 223 Benefit Street. DAVENPORT, JAMES HENRY, M.D. 1887, 5 Harrison Street. DEMING, WILLIAM NELSON, M.D. 1878, 420 Prairie Avenue.

EATON, FRANKLIN MAYNARD, M.D. 1885, 386 Benefit Street.
FORSYTH, FRANK LYMAN, M.D. 1877, Broadway and America Streets.
HALL, HENRY CLEMENT, M.D. 1879, Butler Hospital.
KING, STEPHEN HENRY, M.D. 1872, 268 High Street.
MILLER, HORACE GEORGE, M.D. 1865, 262 Benefit Street.
PERKINS, JAY, M.D. 1891, Rhode Island Hospital.
PETERS, JOHN MATHEWS, M.D. 1887, Rhode Island Hospital.
SMITH, SHEFFIELD, M.D. 1877, 244 North Main Street.
SWARTS, GARDNER TABER, M.D. 1879, 441 Broad Street.
TAYLOR, VERNON OTIS, M.D. 1868, 98 Whitmarsh Street.
TERRY, HERBERT, M.D. 1880, 13 Chestnut Street.
TREMAINE, WILLIAM ALLEN, M.D. 1883, 87 Academy Avenue.
WHITE, WILLIAM ROBBINS, M.D. 1877, 7 Green Street.

OTHER CITIES AND TOWNS.

Bowen, William Shaw, M.D. 1867, East Greenwich.

Briggs, Alexander Burdick, M.D. 1872, Hopkinton, Ashaway.

Chase, Julian Augustine, M.D. 1872, 22 Park Place, Pawtucket.

Curley, John Patrick, M.D. 1878, 18 John Street, Newport.

Fuller, Frank Boutelle, M.D. 1878, 59 High Street, Pawtucket.

Gould, Charles Asahel, M.D. 1881, Adamsville, Little Compton.

Keene, George Frederick, M.D. 1879, State Insane Asylum, Howard.

Mackaye, Henry Goodwin, M.D. 1885, 128 Mill Street, Newport.

Nickerson, Asa Harden, M.D. 1882, 180 Dexter Street, Central Falls.

Potter, Albert, M.D. 1855, P.O. Box 196, Chepacket.

Robinson, Rowland Rodman, M.D. 1888, Wakefield.

Storer, Horatio Robinson, M.D. 1853, 58 Washington Street, Newport.

Tobey, James Edwin, M.D. 1872, 84 Cross Street, Central Falls.

True, Herbert Osgood, M.D. 1886, 16 High Street, Pawtucket.

Williams, William Frederick, M.D. 1889, Bristol.

SOUTH CAROLINA.

Babcock, James Woods, M.D. 1886, Superintendent State Lunatic Asylum, Columbia.

TENNESSEE.

APPLEGATE, WILLIAM A., M.D. 1882, 235 Oak Street, Chattanooga.

TEXAS.

TERRELL, FREDERICK, M.D. 1881, San Antonio.

1

UTAH.

PERKINS, GEORGE WILLIAM, M.D. 1886, 2854 Adams Avenue, Ogden.

VERMONT.

CHISHOLM, ADAM STUART MUIR, M.D. 1883, 610 Main Street, Bennington.
PETTENGILL, EDWARD HENRY, M.D. 1866, Saxton's River.
ROSS, CARROLL BALDWIN, M.D. 1886, 14 Main Street, West Rutland.
SENTON, BENJAMIN CLARENCE, M.D. 1871, Rutland.
SEINNER, RICHARD BAXTER, M.D. 1858, Barton.
WHEELER, JOHN BROOKS, M.D. 1879, 210 Pearl Street, Burlington.

VIRGINIA.

BOUTELLE, JAMES THACHER, M.D. 1871, Hampton.

WASHINGTON.

McDonald, John Ban, M.D. 1865, Centralia. Musgrove, Thomas William, M.D. 1871, P.O. Box 289, Puyallup. Palmer, Franklin Sawyer, M.D. 1890, Seattle.

WEST VIRGINIA.

BAIRD, REED McColloch, M.D. 1882, 72 14th Street, Wheeling. BUCK, HOWARD MENDENHALL, M.D. 1882, Maybeury.

WISCONSIN.

BURGESS, ARTHUR JOSEPH, M.D. 1882, 1102 Grand Avenue, Milwaukee. FRENCH, SAMUEL WILLIAM, M.D. 1878, 1216 Grand Avenue, Milwaukee. HALL, SIDNEY STORRS, M.D. 1867, Ripon. HAYES, EDWARD STEPHEN, M.D. 1881, Eau Claire.

DOMINION OF CANADA.

NEW BRUNSWICK.

ANDREWS, JOSEPH, M.D. 1867, 65 Garden Street, St. John.
CALDWELL, WILLIAM MINNS, M.D. 1867, Fairville, St. John's County.
DEINSTADT, WILLIAM MCKAY, M.D. 1876, St. Stephen.
MACFABLAND, MATHEW LAW, M.D. 1872, Fairville.
OLLOQUI, RUFINO AGUSTIN DE, M.D. 1865, Kingston, County of Kent.

NOVA SCOTIA.

BORDEN, FREDERICK WILLIAM, M.D. 1868, Canning.
BURGESS, FREDERICK NEWTON, M.D. 1865, Cheverie.
CALDER, JAMES SQUAIR, M.D. 1866, Bridgewater.
DE WITT, GEORGE ERASTUS, M.D. 1872, 58 Hollis Street, Halifax.
FALCONER, ALEXANDER FRANK, M.D. 1865, Sherbrooke.
FIXOTT, HENRY JAMES, M.D. 1866, Arichat, Richmond County.
FOSTER, CLARENDON ATWOOD, M.D. 1889, Bridgewater, Lunenberg County.
MCKINNON, JOHN CAMERON, M.D. 1871, Antigonish.
MORSE, JOHN ALLINE W., M.D. 1864, South Ohio.

MORSE, LEANDER RUPERT, M.D. 1860, Lawrencetown.

NORRIE, WILLIAM, M.D. 1867, West Branch River John, County of Pictou.

SUTHERLAND, MURDO, M.D. 1871, Westville.

PRINCE EDWARD ISLAND.

BEER, FRANK DYER, M.D. 1860, Charlottetown.

DODD, SIMON WALKER, M.D. 1867, Queen Street, Charlottetown.

FOREIGN COUNTRIES.

CHILE.

MERRIAM, JOSEPH WAITE, M.D. 1862, Iquique.

MEXICO.

Squires, HARRY SANFORD, M.D. 1881, Aguascalientes.

NEWFOUNDLAND.

CAREY, ROBERT HILLARY, M.D. 1866, Trepassey.

HONORARY MEMBERS OF THE HARVARD MEDICAL SCHOOL ASSOCIATION.

BY ELECTION.

*Bowditch, Henry Ingersoll, M.D. 1832, Boston, Mass.
Cotting, Benjamin Eddy, M.D. 1837, Boston, Mass.
Davis, Robert Thompson, M.D. 1847, Fall River, Mass.
Goodale, George Lincoln, M.D. 1863, Cambridge, Mass.
†Lyman, George Hinckley, M.D. 1843 (Penn.), Boston, Mass.
Shattuck, George Cheyne, M.D. 1835, Boston, Mass.
‡Storer, David Humphreys, M.D. 1825, Boston, Mass.
Walcott, Henry Pickering, M.D. 1861 (Bowdoin), Cambridge, Mass.

DOCTORS OF MEDICINE HAVING RECEIVED HARVARD HONORARY DEGREES, AND CONSEQUENTLY HONORARY MEMBERS.

BILLINGS, JOHN SHAW, M.D. 1860 (Medical College, Ohio), LL.D. Harvard 1886, Washington, D.C.

Coolidge, Algernon, M.D. 1853, A.M. Harvard 1869, Boston, Mass. Hagen, Hermann August, M.D. 1840 (Königsberg), S.D. Harvard 1887, Cambridge, Mass.

HOLMES, OLIVER WENDELL, M.D. 1836, A.M. Harvard 1889, Boston, Mass. MITCHELL, SILAS WEIR, M.D. 1850 (Jefferson), LL.D. Harvard 1886, Philadelphia, Pa.

MOFFATT, GEORGE TUFTON, M.D. 1860, D.M.D. Harvard 1870, Denver, Col.

WILLIAMS, HENRY WILLARD, M.D. 1849, A.M. Harvard 1868, Boston, Mass.

WYMAN, MORRILL, M.D. 1837, LL.D. Harvard 1885, Cambridge, Mass.

Died Jan. 14, 1892.

† Died Aug, 19, 1891.

; Died Sept. 10, 1891.

LIFE MEMBERS.

AMORY, CHARLES, M.D. 1882, Cambridge, Mass.
BLAKE, CLARENCE JOHN, M.D. 1865, Boston, Mass.
BUCK, HOWARD MENDENHALL, M.D. 1882, Maybeury, W. Va.
CUTLER, ELBRIDGE GERRY, M.D. 1872, Boston, Mass.
MINOT, FRANCIS, M.D. 1844, Boston, Mass.
MIXTER, SAMUEL JASON, M.D. 1879, Boston, Mass.
PORTER, CHARLES BURNHAM, M.D. 1865, Boston, Mass.
POWERS, GEORGE HERMAN, M.D. 1865, San Francisco, Cal.
BICHARDSON, WILLIAM LAMBERT, M.D. 1867, Boston, Mass.
SEARS, HENRY FRANCIS, M.D. 1887, Boston, Mass.
SHATTUCK, FREDERICK CHEEVER, M.D. 1873, Boston, Mass.
WIGGLESWORTH, EDWARD, M.D. 1865, Boston, Mass.

DECEASED MEMBERS.

- BOWDITCH, HENRY INGERSOLL, M.D. 1832, Boston, Mass. Died in Boston, Jan. 14, 1892.
- Brown, Buckminster, M.D. 1844, Boston, Mass. Died in Boston, Dec. 25, 1891.
- Fox, Lorenzo Smith, M.D. 1863, Lowell, Mass. Died in Lowell, June 80, 1891.
- HICKS, HERBERT DEXTER, M.D. 1879, Amherst, N.H. Died in Boston, Mass., April 10, 1891.
- JEFFRIES, JOHN AMORY, M.D. 1884, Boston, Mass. Died in Boston, March 25, 1892.
- Jones, Claudius Marcellus, M.D. 1875, Boston, Mass. Died in Boston, Jan. 24, 1892.
- LOCKE, LUTHER FRANKLIN, M.D. 1849, Nashua, N.H. Died in Nashua, Feb. 14, 1892.
- LYMAN, GEORGE HINGELEY, M.D. 1843 (Penn.), Boston, Mass. Died in London, England, Aug. 19, 1891.
- PARKER, EDGAR, M.D. 1863, Bridgewater, Mass. Died in Bridgewater, April 9, 1892.
- PATCH, FRANKLIN FLETCHER, M.D. 1850, Boston, Mass. Died in Boston, Nov. 12, 1891.
- STORER, DAVID HUMPHREYS, M.D. 1825, Boston, Mass. Died in Boston, Sept. 10, 1891.

SUMMARY.

	nber of mbers.	Number of Members
ARIZONA	. 2	Оню
California:		OREGON
San Francisco	. 11	Pennsylvania
Other Cities and Towns	. 13	RHODE ISLAND:
COLORADO	. 6	Providence 12
CONNECTICUT	. 15	Other Cities and Towns 15
DISTRICT OF COLUMBIA	. 2	SOUTH CAROLINA
FLORIDA	. 1	TENNESSEE
Illinois:		TEXAS
Chicago	. 10	Uтан
Other Cities and Towns	. 4	VERMONT
Indiana	. 2	Virginia
Iowa	. 3	Washington
Kansas	. 3	WEST VIRGINIA
KENTUCKY	. 2	Wisconsin
MAINE	. 19	DOMINION OF CANADA:
MARYLAND	. 4	New Brunswick
Massachusetts:		Nova Scotia
Boston	. 348	Prince Edward Island
Other Cities and Towns	. 357	Foreign Countries:
Michigan	. 6	Chile
MINNESOTA	. 10	Mexico
Missouri	. 8	Newfoundland
Montana	. 2	Members
NEW HAMPSHIRE	. 31	HONORARY MEMBERS 1
New Jersey	. 2	HONORARY MEMBERS
NEW YORK:		TOTAL NUMBER OF MEMBERS 1,01
New York City	. 29	
Other Cities and Towns	. 21	LIFE MEMBERS 1
NORTH CAROLINA	. 1	DECEASED MEMBERS 1

ALPHABETICAL LIST OF MEMBERS.

Abbe, Alanson Joseph, M.D. 1885	Fall River, Mass.
ABBOT, SAMUEL LEONARD, M.D. 1841	Boston, Mass.
ABBOTT, CHARLES EDWARD, M.D. 1881	Andover, Mass.
ABBOTT, SAMUEL WARREN, M.D. 1862	Wakefield, Mass.
Adams, Enoch, M.D. 1851	Litchfield, Me.
Adams, George Edwin, M.D. 1880	Worcester, Mass.
Adams, James Foster Alleyne, M.D. 1866.	Pittsfield, Mass.
Adams, Zabdiel Boylston, M.D. 1853	Framingham, Mass.
AHEARNE, CORNELIUS AUGUSTUS, M.D. 1866.	Lynn, Mass.
AHEARNE, CORNELIUS AUGUSTUS, JR., M.D.1889	Lynn, Mass.
AIKEN, ELISHA WILBOUR, M.D. 1864	Boston, Mass.
ALDRICH, ALBERT CLINTON, M.D. 1883	Somerville, Mass.
ALDRICH, EZRA BARNES, M.D. 1868	Manchester, N.H.
ALDRICH, NATHANIEL BORDEN, M.D. 1889	Fall River, Mass.
ALLEN, DUDLEY PETER, M.D. 1880	Cleveland, Ohio.
ALLEN, GARDNER WELD, M.D. 1882	Boston, Mass.
ALLEN, JUSTIN, M.D. 1856	Topsfield, Mass.
Amory, Charles, M.D. 1832	Cambridge, Mass.
AMORY, ROBERT, M.D. 1866	Boston, Mass.
Andrews, Joseph, M.D. 1867	St. John, N.B.
ANTHONY, FRANCIS WAYLAND, M.D. 1888	Bradford, Mass.
APPLEGATE, WILLIAM A., M.D. 1882	Chattanooga, Tenn.
ATWOOD, CHARLES AUGUSTUS, M.D. 1883	Taunton, Mass.
ATWOOD, FRANK SUMNER, M.D. 1882	Salem, Mass.
AYER, JAMES BOURNE, M.D. 1873	Boston, Mass.
AYER, RICHARD GILBERT, M.D. 1891	Somerville, Mass.
AYER, SILAS HIBBARD, M.D. 1884	Boston, Mass.
AYER, WASHINGTON, M.D. 1847	San Francisco, Cal.
BABCOCK, JAMES WOODS, M.D. 1886	Columbia, S.C.
Babin, Hosea John, M.D. 1866	Brooklyn, N.Y.
BACON, JONAS EDWARD, M.D. 1878	Brockton, Mass.
BAIRD, REED McColloch, M.D. 1882	Wheeling, W. Va.
BAKER, DAVID ERASTUS, M.D. 1883	Newtonville, Mass.

Baker, John Walter, M.D. 1881	Charlestown, Mass.
BAKER, WILLIAM HENRY, M.D. 1872	Boston, Mass.
BALDWIN, FREDERICK WILLIAM, M.D. 1886 .	Danvers, Mass.
BALDWIN, HENRY CUTLER, M.D. 1884	Boston, Mass.
BALL, THOMAS JOSEPH, M.D. 1887	Chelsea, Mass.
BALLARD, ALBERT MANLEY, M.D. 1868	Asheville, N.C.
BANCROFT, CHARLES PARKER, M.D. 1878	Concord, N.H.
BANCROFT, GEORGE ANDREW, M.D. 1890	South Natick, Mass.
BARNES, FRANCIS JOHN, M.D. 1888	Cambridge, Mass.
BARNES, HENRY JABEZ, M.D. 1872	Boston, Mass.
BARSS, JAMES RICHMOND, M.D. 1873	Malden, Mass.
BARSTOW, HENRY TAYLOR, M.D. 1884	Boston, Mass.
BARTLETT, CYRUS KILLAM, M.D. 1852	St. Peter, Minn.
BEACH, HENRY HARRIS AUBREY, M.D. 1868.	Boston, Mass.
BEER, FRANK DYER, M.D. 1860	Charlottetown, P.E.I.
Bell, Read Letts, M.D. 1876	Springfield, Ohio.
Bell, William Appleton, M.D. 1876	Somerville, Mass.
Belt, Charles Bradford, M.D. 1871	South Boston, Mass.
BIGELOW, ENOS HOYT, M.D. 1882	Framingham, Mass.
BIGELOW, WILLIAM STURGIS, M.D. 1874	Boston, Mass.
Blaisdell, George Clark, M.D. 1867	Contoocook, N.H.
Blaisdell, Walter Channing, M.D. 1867 .	Boston, Mass.
Blake, Clarence John, M.D. 1865	Boston, Mass.
BLAKE, HARRISON GRAY, M.D. 1888	Woburn, Mass.
Blake, John George, M.D. 1861	Boston, Mass.
Blanchard, Albert Henry, M.D. 1851	Sherborn, Mass.
Blanchard, Benjamin Seaver, M.D. 1882 .	Brookline, Mass.
BLODGETT, ALBERT NOVATUS, M.D. 1871	Boston, Mass.
BLODGETT, FRANK MARCELLUS, M.D. 1870	New York, N.Y.
BLODGETT, STEPHEN HASKELL, M.D. 1887	Cambridge, Mass.
BLOOD, ROBERT ALLEN, M.D. 1870	Charlestown, Mass.
BLOOM, ISADORE NATHAN, M.D. 1881	Louisville, Ky.
BOARDMAN, WILLIAM ELBRIDGE, M.D. 1868 .	Boston, Mass.
BOARDMAN, WILLIAM SYDNEY, M.D. 1886	Boston, Mass.
Bolles, William Palmer, M.D. 1871	Roxbury, Mass.
Bolton, Charles James, M.D. 1888	South Boston, Mass.
BOOTH, EDWARD CHAUNCEY, M.D. 1877	Somerville, Mass.
BORDEN, FREDERICK WILLIAM, M.D. 1868	Canning, N.S.
BORDEN, HENRY FRANCIS, M.D. 1869	Brockton, Mass.
BOUTELLE, JAMES THACHER, M.D. 1871	Hampton, Va.
BOUTWELL, HENRY THATCHER, M.D. 1870	Manchester, N.H.
BOUTWELL, HENRY WINSLOW, M.D. 1882	Manchester, N.H.
Bowditch, Henry Pickering, M.D. 1868	Jamaica Plain, Mass.
BOWDITCH, VINCENT YARDLEY, M.D. 1879	Boston, Mass.
Bowen, John Templeton, M.D. 1884	Boston, Mass.

Bowen, Seranus, M.D. 1876	Roxbury, Mass.
Bowen, William Shaw, M.D. 1867	East Greenwich, R.I.
Bowers, Walter Prentice, M.D. 1879	Clinton, Mass.
BOYD, ROBERT, M.D. 1868	Linneus, Me.
BOYD, SAMUEL GEORGE, M.D. 1885	San Francisco, Cal.
BOYDEN, FRANK EDWARD, M.D. 1885	Brooklyn, N.Y.
BRACKETT, ELLIOTT GRAY, M.D. 1886	Boston, Mass.
Bradford, Edward Hickling, M.D. 1873	Boston, Mass.
Bradford, Henry Withington, M.D. 1875.	Boston, Mass.
Brainerd, John Bliss, M.D. 1884	Boston, Mass.
Brannan, John Winters, M.D. 1878	New York, N.Y.
Brechin, William Pitt, M.D. 1872	Boston, Mass.
Breck, Samuel, M.D. 1886	Boston, Mass.
Breck, Theodore Frelinghuysen, M.D. 1866	Springfield, Mass.
Brennan, John Joseph, M.D. 1886	Worcester, Mass.
BRIGGS, ALEXANDER BURDICK, M.D. 1872	Hopkinton, Ashaway, R.I.
Briggs, Charles Edward, M.D. 1856	St. Louis, Mo.
BRIGGS, EDWARD CORNELIUS, M.D. 1880	Boston, Mass.
BRIGGS, FREDERIC MELANCTHON, M.D. 1883 .	Boston, Mass.
Brigham, Charles Brooks, M.D. 1870	San Francisco, Cal.
Brigham, Edwin Howard, M.D. 1868	Boston, Mass.
Brigham, Franklin Whiting, M.D. 1865.	Shrewsbury, Mass.
Brooks, Stephen Driver, M.D. 1882	Cleveland, Ohio.
BROUGHTON, HENRY WHITE, M.D. 1879	Jamaica Plain, Mass.
Brown, Charles William M., M.D. 1876	Elmira, N.Y.
Brown, Dillon, M.D. 1885	New York, N.Y.
Brown, Francis Henry, M.D. 1861	Boston, Mass.
Brown, John Peaslee, M.D. 1865	Taunton, Mass.
Browne, Henry Wheelock, M.D. 1856	Hubbardston, Mich.
Brownrigg, John Sylvester, M.D. 1887	Boston, Mass.
BRYANT, JOHN, M.D. 1878	Boston, Mass.
BRYANT, LEWIS LINCOLN, M.D. 1874	Cambridgeport, Mass.
BRYANT, WILLIAM SOHIER, M.D. 1888	Cohasset, Mass.
Buck, Howard Mendenhall, M.D. 1882	Maybeury, W. Va.
BUCKINGHAM, EDWARD MARSHALL, M.D. 1874	Boston, Mass.
Bullard, John Thornton, M.D. 1887	New Bedford, Mass.
Bullard, William Norton, M.D. 1880	Boston, Mass.
Bullock, Edwin Warren, M.D. 1886	Haverhill, Mass.
Bundy, Frank Eastman, M.D. 1862	Boston, Mass. [Ia.
Burbank, Oscar, M.D. 1848	Waverly, Bremer Co.,
Burchmore, John Henry, M.D. 1875	Evanston, Ill.
BURDETT, GEORGE WASHINGTON, M.D. 1846 .	Clinton, Mass.
Burgess, Arthur Joseph, M.D. 1882	Milwaukee, Wis.
Burgess, Frederick Newton, M.D. 1865	Cheverie, N.S.
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Burgess, Oliver Graham, M.D. 1885 Boston, Mass. Burns, Hiram Hutchins, M.D. 1887. . . Athol Centre, Mass. BURNS, ROBERT, M.D. 1879 Plymouth, N.H. BURRAGE, WALTER LINCOLN, M.D. 1888 Boston, Mass. Burrell, Herbert Leslie, M.D. 1879 . . Boston, Mass. Bush, John Standish Foster, M.D. 1874. Boston, Mass. Bushee, James Anson, M.D. 1870 East Boston, Mass. BUTLER, WINTHROP, M.D. 1866 . . Vineyard Haven, Mass. BUTMAN, GEORGE FEVERYEAR, M.D. 1865. Dorchester, Mass. Buxton, Gonzalo Edward, M.D. 1876 . . National City, Cal. CABOT, ARTHUR TRACY, M.D. 1876 Boston, Mass. CAHILL, CHARLES SUMNER, M.D. 1886 Cambridgeport, Mass. CALDER, JAMES SQUAIR, M.D. 1866 Bridgewater, N.S. CALDWELL, WILLIAM MINNS, M.D. 1867. Fairville, St. John's Co., N.B. CALLANAN, SAMSON ALOYSIUS, M.D. 1886 . . Roxbury, Mass. CAMPBELL, BENJAMIN FRANKLIN, M.D. 1857. East Boston, Mass. CAREY, ROBERT HILLARY, M.D. 1866 Trepassey, Newf'n'l'd. CARLETON, CHARLES GREENLEAF, M.D. 1867 Lawrence, Mass. CARLL, WALTER EDWARD, M.D. 1885 Oregon City, Oregon. CARNEY, SYDNEY HOWARD, M.D. 1861 New York, N.Y. CARROLL, THOMAS FRANCIS, M.D. 1888. Newton, Mass. CARRUTHERS, ARCHIBALD KEIGHTLY, M.D.1872 Rockbottom, Mass. CARTER, CYRUS FAULKNER, M.D. 1887 . . . Boston, Mass. CARVELLE, HENRY DE WOLFE, M.D. 1878 . Manchester, N.H. CARVER, RUFUS HERBERT, M.D. 1870 . . . Providence, R.I. CHADWICK, JAMES READ, M.D. 1871 . Boston, Mass. CHANDLER, FREDERICK ALPHEUS, M.D. 1883 Addison, Me. CHANDLER, LUTHER GRAVES, M.D. 1871 Townsend, Mass. CHANDLER, NORMAN FITCH, M.D. 1888 . Medford, Mass. CHANNING, WALTER, M.D. 1872 Brookline, Mass. CHASE, GEORGE THORNDIKE, M.D. 1885. New York, N.Y. Brookline, Mass. Chase, Heman Lincoln, M.D. 1887 . . CHASE, HIRAM LUCE, M.D. 1846 Cambridgeport, Mass. CHASE, JULIAN AUGUSTINE, M.D. 1872 Pawtucket, R.I. CHASE, WILLARD DUNLAP, M.D. 1866 Peterborough, N.H. CHEEVER, CLARENCE ALONZO, M.D. 1883 Mattapan, Mass. CHEEVER, DAVID WILLIAM, M.D. 1858 . Boston, Mass. CHENERY, ELISHA, M.D. 1853 Boston, Mass. CHENERY, WILLIAM ELISHA, M.D. 1890. Boston, Mass. CHENRY, FREDERICK EDWARD, M.D. 1885 . Boston, Mass. CHISHOLM, ADAM STUART MUIR, M.D. 1883 Bennington, Vt. CLARK, GEORGE STILLMAN, M.D. 1885 Worcester, Mass. CLARK, JONAS, M.D. 1875 Woodland, Cal.

CLARK, JOSEPH EDDY, M.D. 1882 Medford, Mass. CLARK, JOSEPH PAYSON, M.D 1887 Boston, Mass. CLARK, LEONARD BROWN, M.D. 1889. Waverly, Mass. CLARK, SIDNEY AVERY, M.D. 1891. . Northampton, Mass. CLARKE, AUGUSTUS PECK, M.D. 1862. Cambridgeport, Mass. CLARKE, AUGUSTUS TUPPER, M D. 1870. Calais, Me. CLARKE, MAURICE DWIGHT, M.D. 1882 Haverhill, Mass. CLARKE, SAMUEL BARTLETT, M.D. 1880 . . Salem, Mass. CLEAVES, JAMES EDWIN, M.D. 1879 Medford, Mass. Haverhill, Mass. CLEMENT, GEORGE COLBURN, M.D. 1880. CLEMENT, GEORGE WILMOT, M.D. 1873. Roxbury, Mass. CLIFF, LEANDER ALBERT, M.D. 1874 . . Boston, Mass. CLOUGH, BRNJAMIN FRANKLIN, M.D. 1869 . Worcester, Mass. COBB, CHARLES HENRY, M.D. 1881 Boston, Mass. COBB, FREDERIC CODMAN, M.D. 1887 Boston, Mass. COCKBURN, JOHN CASSILIS, M.D. 1872 Minneapolis, Minn. CODMAN, BENJAMIN STORER, M.D. 1845 Boston, Mass. COE. HENRY CLARK. M.D. 1881 New York, N.Y. COGAN, JOSEPH AMBROSE, M.D. 1887 . . Boston, Mass. COGGESHALL, HENRY TISDALE, M.D. 1883. New York, N.Y. COGGIN, DAVID, M.D. 1868 Salem, Mass. COGSWELL, CHARLES HALE, M.D. 1883 . . . Deer Island, Boston Harbor, Mass. COGSWELL, EDWARD RUSSELL, M.D. 1867 Cambridge, Mass. COLEY, WILLIAM BRADLEY, M.D. 1888 New York, N.Y. COLLINS, DAVID ALOYSIUS, M.D. 1886 Boston, Mass. COLLINS, GEORGE LEWIS, M.D. 1879 Providence, R.I. Collins, Orville William, M.D. 1887. So. Framingham, Mass. COLT, HENRY, M.D. 1881 Pittsfield, Mass. COMEY, PERLEY PIERCE, M.D. 1878 Clinton, Mass. CONANT, WILLIAM MERRITT, M.D. 1884 Boston, Mass. Brockton, Mass. Conlan, Thomas, M.D. 1887 CONNELL, ARTHUR IRVING, M.D. 1890 Fall River, Mass. CONNELLY, M. EMMET, M.D. 1870 . . Dubuque, Ia. Coolidge, Algernon, Jr., M.D. 1886 Boston, Mass. Coolidge, Frederic Shurtleff, M.D. 1891 . Chicago, Ill. Cooper, Charles Wendell, M.D. 1877 Northampton, Mass. COPELAND, HORATIO FRANKLIN, M.D. 1865 Whitman, Mass. CORNISH, ELLIS HOLMES, M.D. 1867 . . . Carver, Mass. Couch, John Francis, M.D. 1872 . . Somerville, Mass. Cambridgeport, Mass. COUCH, JOSEPH DANIEL, M.D. 1883 COWLES, WILLIAM NORMAN, M.D. 1887 . . Ayer, Mass. CRAFTS, LEO MELVILLE, M.D. 1890 . . Minneapolis, Minn. Holbrook, Ariz. CRAIG, SYDNEY MORGAN, M.D. 1886 . CRAWFORD, JOHN WILLIAM, M.D. 1867 . . Lawrence, Mass.

CREHORE, CHARLES FREDERIC, M.D. 1859 . . Newton L. Falls, Mass. CROCKER, JOHN MYRICK, M.D. 1866 . . . Cambridgeport, Mass. CROWELL, SAMUEL, M.D. 1885 . . . Dorchester, Mass. CROZIER, THOMAS, M.D. 1863 Charlestown, Mass. CUNNINGHAM, THOMAS EDWARD, M.D. 1883 Cambridgeport, Mass. CURLEY, JOHN PATRICK, M.D. 1878 . . . Newport, R.I. CURTIS, HALL, M.D. 1857 Boston, Mass. Cushing, Benjamin, M.D. 1846 Dorchester, Mass. Cushing, Hayward Warren, M.D. 1882 . Boston, Mass. CUSHING, JOSEPH WHITNEY, M.D. 1861 . . Boston, Mass. CUTLER, EDWARD ROLAND, M.D. 1863 . . Waltham, Mass. CUTLER, ELBRIDGE GERRY, M.D. 1872 Boston, Mass. CUTLER, WILLIAM BULLARD, M.D. 1872 Boston, Mass. CUTTER, CHARLES KIMBALL, M.D. 1876. Charlestown, Mass. CUTTER, EDWARD JONES, M.D. 1881 . . . Leominster, Mass. CUTTER, EPHRAIM, M.D. 1856 New York, N.Y. CUTTER, JOHN CLARENCE, M.D. 1877. Worcester, Mass. CUTTS, HARRY MADISON, M.D. 1883 . Brookline, Mass. DANA, ISRAEL THORNDIKE, M.D. 1850 . Portland, Me. DANFORTH, WILLIAM HENRY, M.D. 1886 Worcester, Mass. DANIELS, EDWIN ALFRED, M.D. 1877 Boston, Mass. DANIELS, FRANK HERBERT, M.D. 1884 New York, N.Y. DARRAH, RUFUS ELMER, M.D. 1890 . . . Boston, Mass. DAVENPORT, BENNETT FRANKLIN, M.D. 1871. Boston, Mass. DAVENPORT, FRANCIS HENRY, M.D. 1874 . Boston, Mass. DAVENPORT, JAMES HENRY, M.D. 1887 . Providence, R.L. DAVIS, NATHAN JOHNSON, M.D. 1871 . . . Somerville, Mass. DAVIS, SAMUEL ALONZO, M.D. 1862 . . . Charlestown, Mass. DAVIS, SUMNER DANFORTH, M.D. 1869 . . Jermyn, Pa. DAVISON, ARCHIBALD THOMPSON, M.D. 1871 . South Boston, Mass. Boston, Mass. DEAN, EDGAR EVERETT, M.D. 1861 Brockton, Mass. DEARING, THOMAS HAVEN, M.D. 1861 Braintree, Mass. DEINSTADT, WILLIAM McKAY, M.D. 1876 St. Stephen, N.B. DE LAND, CHARLES AIRMET, M.D. 1885. Warren, Mass. DEMING, WILLIAM NELSON, M.D. 1878 Providence, R.I. DENNY, CHARLES FREDERIC, M.D. 1882 . St. Paul, Minn. DENTON, MYRON PRESTON, M.D. 1887 New York, N.Y. DERBY, RICHARD HENRY, M.D. 1867. New York, N.Y. DERBY, WILLIAM PARSONS, M.D. 1890 Boston, Mass. DEROIN, FRANCIS XAVIER, M.D. 1883 Chicopee, Mass. DEWEY, CHARLES AYRAULT, M.D. 1880 . . Rochester, N.Y. DE WITT, GEORGE ERASTUS, M.D. 1872 . . . Halifax, N.S. DeWolf, James Edward, M.D. 1866 . . . Chicago, Ill.

DISBROW, ROBERT, M.D. 1865 Boston, Mass. DIXON, LEWIS SEAVER, M.D. 1871 . . . Boston, Mass. DIXON, ROBERT BREWER, M.D. 1879 . . . Boston, Mass. Dodd, Simon Walker, M.D. 1867 Charlottetown, P.E.I. Dodge, William Wooldredge, M.D. 1886 Boston, Mass. Donahue, Hugh, M.D. 1888 Haverhill, Mass. Donovan, Henry Vincent, M.D. 1891 . . Lawrence, Mass. Dorcey, James Edmund, M.D. 1878 . . . Boston, Mass. Dow, EDMUND SCOTT, M.D. 1887 Allston, Mass. Dow, GEORGE WILLIAM, M.D. 1881 Lawrence, Mass. Draper, Frank Winthrop, M.D. 1869 . Boston, Mass. Drew, Frank Haynes, M.D. 1882 Shelburne Falls, Mass. DRIVER, STEPHEN WILLIAM, M.D. 1863 . Cambridge, Mass. Drummey, Nicholas Daniel, M.D. 1887 . . Boston, Mass. DUDLEY, HENRY WATSON, M.D. 1864 . . . Abington, Mass. DUNBAR, EUGENE FILLMORE, M.D. 1880 Roxbury, Mass. [N.Y. Dunham, Carroll, M.D. 1887 Irvington on Hudson, DUNHAM, MARTIN VAN BUREN, M.D. 1867 . . Greenfield Hill, Conn. Dunham, Theodore, M.D. 1888 Irvington on Hudson, N.Y. DUNN, WILLIAM ALOYSIUS, M.D. 1875 Boston, Mass. DURANT, CHARLES EDWIN, M.D. 1885 Haverhill, Mass. DURELL, THOMAS MOULTON, M.D. 1879 . Somerville, Mass. DURGIN, SAMUEL HOLMES, M.D. 1864 Boston, Mass. DUTTON, CHARLES, M.D. 1863 . . . Tyngsborough, Mass. DUTTON, SAMUEL LANE, M.D. 1860 Roxbury, Mass. DWELLY, JEROME, M.D. 1847 . . . Fall River, Mass. DWIGHT, THOMAS, M.D. 1867 Boston, Mass. EASTMAN, EDMUND TUCKER, M.D. 1850 . . . Boston, Mass. EATON, FRANKLIN MAYNARD, M.D. 1885 Providence, R.I. EATON, JOHN MARSHALL, M.D. 1856 . . Milford, Mass. EATON, PERCIVAL JAMES, M.D. 1888 Pittsburg, E. E., Pa. EDES, ROBERT THAXTER, M.D. 1861 . Jamaica Plain, Mass. EDMUNDS, CHARLES DOLE, M.D. 1886 Bangor, Me. EHRLICH, HENRY, M.D. 1886 Boston, Mass. ELA, WALTER, M.D. 1875 Cambridge, Mass. ELDRIDGE, DAVID GORHAM, M.D. 1886 . . . Dorchester, Mass. ELLIOT, EDWARD PEARSON, M.D. 1882 . Danvers, Mass. ELLIOT, JOHN WHEELOCK, M.D. 1878 Boston, Mass. ELLIOTT, RUSSELL DUNSON, M.D 1873 Boston, Mass. ELLIS, FREDERIC WARREN, M.D. 1881 Monson, Mass. ELLIS, GEORGE LIVINGSTON, M.D. 1872 . . . Middleboro, Mass. EMERY, WILLIAM HENRY, M.D. 1870 . . . Roxbury, Mass. Ensworth, William Howard, M.D. 1888 East Boston, Mass.

Jamaica Plain, Mass. ERNST, HAROLD CLARENCE, M.D. 1880 . . . EVERETT, WILLARD SHEPARD, M.D. 1864 . . Hyde Park, Mass. FALCONER, ALEXANDER FRANK, M.D. 1865. . Sherbrooke, N.S. FALLON, MICHARL FRANCIS, M.D. 1887 . . Worcester, Mass. FARLOW, JOHN WOODFORD, M.D. 1877 Boston, Mass. FARLOW, WILLIAM GILSON, M.D. 1870 Cambridge, Mass. FAULKNER, HERBERT KIMBALL, M.D. 1885. Keene, N.H. FAUNCE, ROBERT HARRIS, M.D. 1882 Sandwich, Mass. FENWICK, JOSEPH BENSON, M.D. 1872 Chelsea, Mass. FERNALD, CHARLES AUGUSTUS, M.D. 1872 Boston, Mass. FESSENDEN, GEORGE RUSSELL, M.D. 1879 . . . Ashfield, Mass. FICHTENEAM, HARRY LAMARTINE, M.D. 1869. St. Louis, Mo. E. Bridgewater, Mass. FIELD, CHARLES ELMER, M.D. 1878 FIELD, JAMES BRAINERD, M.D. 1884 Lowell, Mass. FIFIELD, WILLIAM CRANCH BOND, M.D. 1851. Dorchester, Mass. FILLEBROWN, CHARLES DALTON, M.D. 1887 . Boston, Mass. FINN, EDWARD WILLIAM, M.D. 1890, Roxbury, Mass. FINN, JAMES ANTHONY, M.D. 1875 Boston, Mass. FINN, WILLIAM HENRY, M.D. 1863 Philadelphia, Pa. FINNEY, JOHN MILLER TURPIN, M.D. 1889 . Baltimore, Md. FINNIGAN, PATRICK JOSEPH, M.D. 1883 . . . East Cambridge, Mass. FISHER, CHESTER IRVING, M.D. 1870 . . . New York, N.Y. FISHER, THEODORE WILLIS, M.D. 1861 . . South Boston, Mass. Fisk, Arthur Lyman, M.D. 1889 . . . New York, N.Y. Fisk, Samuel Augustus, M.D. 1880 Denver, Col. FISKE, EUSTACE LINCOLN, M.D. 1886 Fitchburg, Mass. FITZ, GEORGE WELLS, M.D. 1891 Cambridge, Mass. FITZ, REGINALD HEBER, M.D. 1868 . . Boston, Mass. Arichat, Richmond Co., FIXOTT, HENRY JAMES, M.D. 1866 N.S. FLINT, JAMES MILTON, M.D. 1860 Washington, D.C. FOGG, WILLIAM JOHN GORDON, M.D. 1876 South Boston, Mass. FOLEY, WALTER JAMES PAUL, M.D. 1888 . Roxbury, Mass. Folsom, Charles Follen, M.D. 1870 . Boston, Mass. Folsom, Norton, M.D. 1864 Cambridge, Mass. Forster, Edward Jacob, M.D. 1868 . . . Boston, Mass. FORSYTH, FRANK LYMAN, M.D. 1877 . . Providence, R.I. FOSTER, BURNSIDE, M.D. 1886 St. Paul, Minn. FOSTER, CHARLES CHAUNCEY, M.D. 1883 Cambridge, Mass. FOSTER, CLARENDON ATWOOD, M.D. 1889 Bridgewater, Lunenburg Co., N.S. FOSTER, HUBBARD AUGUSTUS, M.D. 1871 Buffalo, N.Y. Fox, William Yale, M.D. 1888 Taunton, Mass. . . . Francis, George Ebenezer, M.D. 1863 . . Worcester, Mass.

FRANCIS, GEORGE HILLS, M.D. 1887 . . . Brookline, Mass. FRANCIS, RICHARD PEARCE, M.D. 1888 . Montclair, N.J. Francis, Tappan Eustis, M.D. 1847 . . . Brookline, Mass. Francois, Edward Albert Louis, M.D. 1866 Saugus, Mass. FRASER, DONALD ALLAN, M.D. 1891 East Boston, Mass. FRENCH, GEORGE FRANKLIN, M.D. 1862. Minneapolis, Minn. French, George Morrill, M.D. 1884 . Malden, Mass. FRENCH, SAMUEL WILLIAM, M.D. 1878 . . Milwaukee, Wis. FULLER, DANIEL HUNT, M.D 1889 Somerville, Mass. Fuller, Eugene, M.D. 1881 New York, N.Y. FULLER, FRANK BOUTELLE, M.D. 1878 Pawtucket, R.I. GAGE, HOMER, M.D. 1887 Worcester, Mass. GAGE, JAMES ARTHUR, M.D. 1885 . . . Lowell, Mass. GAGE, THOMAS HOVEY, M.D. 1852. . Worcester, Mass. GALLIGAN, EUGENE THOMAS, M.D. 1882 Roxbury, Mass. GALLOUPE, CHARLES WILLIAM, M.D. 1883. Boston, Mass. GALLOUPE, ISAAC FRANCIS, M.D. 1849 Lynn, Mass. GALVIN, GEORGE WILLIAM, M.D. 1878 . . Boston, Mass. GARCEAU, EDGAR, M.D. 1889 Roxbury, Mass. GARDNER, EDWIN FISHER, M.D. 1875. Buffalo, N.Y. GARDNER, GUY HUBBARD, M.D. 1879 . . Winchester, Mass. GARLAND, GEORGE MINOT, M.D. 1874 Boston, Mass. GARLAND, JOSEPH EVERETT, M.D. 1877. Gloucester, Mass. GARLICK, SAMUEL MIDDLETON, M.D. 1877 . Bridgeport, Conn. GATES, GEORGE WELLESLEY, M.D. 1884 Roxbury, Mass. GAVIN, MICHAEL FREEBERN, M.D. 1864 South Boston, Mass. GAVIN, PATRICK FREEBERN, M.D. 1870 South Boston, Mass. GAY, GEORGE WASHINGTON, M.D. 1868 . Boston, Mass. GEROULD, JOSEPH BOWDITCH, M.D. 1881 North Attleboro, Mass. GERRY, EDWIN PEABODY, M.D. 1874 . . Jamaica Plain, Mass. GIBSON, CHARLES LANGDON, M.D. 1889 . New York, N.Y. GIDDINGS, WOOSTER PARKER, M.D. 1871 Gardner, Me. GIFFORD, JOHN HENRY, M.D. 1884 Fall River, Mass. GILBERT, JOHN HENRY, M.D. 1853 . . . Quincy, Mass. GILMAN, WARREN RANDALL, M.D. 1888. Worcester, Mass. GILMARTIN, PETER PAUL, M.D. 1865 . . Detroit, Mich. GOLDSMITH, CHARLES ALMON, M.D. 1869 Methuen, Mass. GOLDTHWAIT, JOEL ERNEST, M.D. 1890. Boston, Mass. GOODALE, WALTER TEMPLE, M.D. 1887 . . . Saco, Me. GOODELL, GEORGE ZINA, M.D. 1881 Salem, Mass. GOODWIN, RICHARD JAMES PLUMER, M.D. 1865 Malden, Mass. GORDON, JOHN ALEXANDER, M.D. 1871 . . . Quincy, Mass. GORDON, STEPHEN MASURY, M.D. 1885 . . . Fall River, Mass. Goss, Francis Webster, M.D. 1869 Roxbury, Mass.

Goss, Ossian Wilbur, M. D. 1882	Lake Village, N.H.
GOULD, CHARLES ASAHEL, M.D. 1881	Adamsville, Little
	Compton, R.I.
GOULD, CLARKE STORER, M.D. 1888	Norwood, Mass.
GOULD, LAWRENCE MIRVIN, M.D. 1877	Hyde Park, Mass.
GRANDIN, EGBERT HENRY, M.D. 1880	New York, N.Y.
GRAVES, CHARLES BURR, M.D. 1886	New London, Conn.
GRAY, CHARLES HENRY, M.D. 1891	Cambridgeport, Mass.
GREELEY, MOSES REUBEN, M.D. 1850	So. Weymouth, Mass.
GREEN, CHARLES MONTRAVILLE, M.D. 1877 .	Boston, Mass.
GREEN, JOHN, M.D. 1866	St. Louis, Mo.
GREEN, JOHN ORNE, M.D. 1866	Boston, Mass.
GREEN, SAMUEL ABBOTT, M.D. 1854	Boston, Mass.
GREENE, EDWARD MILLER, M.D. 1888	Boston, Mass.
GREENE, JAMES SUMNER, M.D. 1863	Dorchester, Mass.
GREENLEAF, RICHARD CRANCH, M.D. 1870 .	Lenox, Mass.
GREENLEAF, ROBERT WILLARD, M.D. 1885.	Boston, Mass.
GREENOUGH, FRANCIS BOOTT, M.D. 1866	Boston, Mass.
GREENWOOD, ALLEN, M.D. 1889	Waltham, Mass.
GREENWOOD, SEWELL ELLIOTT, M.D. 1877	Templeton, Mass.
GRIFFIN, ARTHUR GEORGE, M.D. 1883	Malden, Mass.
GRIMM, CHARLES HENRY, M.D. 1883	San Francisco, Cal.
Guiteras, Ramon, M.D. 1883	New York, N.Y.
HADDOCK, CHARLES WHITNEY, M.D. 1879	Beverly, Mass.
Нан и, Аммі Ruhamah, M.D. 1869	East Boston, Mass.
HALE, JOSIAH LITTLE, M.D. 1868	Brookline, Mass.
HALL, EDWARD DORMENIO, M.D. 1873	Meriden, Conn.
HALL, HENRY CLEMENT, M.D. 1879	Providence, R.I.
HALL, JOSIAH NEWHALL, M.D. 1882	Sterling, Col.
HALL, NEWBERT JACKSON, M.D. 1885	Charlestown, Mass.
HALL, SIDNEY STORRS, M.D. 1867	Ripon, Wis.
HALL, WILLIAM DUDLEY, M.D. 1883	Boston, Mass.
HAMMOND, CHARLES BARTLETT, M.D. 1880 .	Nashua, N.H.
HAMMOND, HENRY LOUIS, M.D. 1866	Killingly, Conn.
HAMMOND, WILLIAM PENN, M.D. 1873	Charlestown, Mass.
HANDY, BENJAMIN JONES, M.D. 1871	Fall River, Mass.
HANSCOM, SANFORD, M.D. 1868	East Somerville, Mass.
HARE, CHARLES HENRY, M.D. 1889	Boston, Mass.
HARKINS, DANIEL STANISLAUS, M.D. 1888	Long Island, Boston
	Harbor, Mass.
HARMON, SAMUEL TAPPAN, M.D. 1881	Boston, Mass.
HARRINGTON, CHARLES, M.D. 1881	Jamaica Plain, Mass.
HARRINGTON, FRANCIS BISHOP, M.D. 1881	Boston, Mass.
HARRINGTON, FRANK ABRAM, M.D. 1887	Buffalo, N.Y.

HARRINGTON, THOMAS FRANCIS, M.D. 1888 .	Lowell, Mass.
HARRIS, FRANCIS AUGUSTINE, M.D. 1872	Boston, Mass.
HARROWER, DAVID, JR., M.D. 1884	Worcester, Mass.
HARTNETT, MAURICE KING, M.D. 1859	Boston, Mass.
HARVEY, EDWIN BAYARD, M.D. 1866	Westborough, Mass.
HASKELL, WILLIAM ABRAHAM, M.D. 1869	Alton, Ill.
HASLAM, FRANK ALDEN, M.D. 1885	Boston, Mass.
HASTINGS, DANIEL GOTT, M.D. 1888	Rochester, N.Y.
Hastings, Joseph Wilcox, M.D. 1856	Warren, Mass.
HASTINGS, WILLIAM HENRY HOWE, M.D. 1868	Boston, Mass.
HAVEN, GEORGE, M.D. 1883	Boston, Mass.
HAVEN, HENRY CECIL, M.D. 1879	Boston, Mass.
HAYES, EDWARD STEPHEN, M.D. 1881	Eau Claire, Wis.
HAYES, STEPHEN WILLIAM, M.D. 1870	New Bedford, Mass.
HAYES, THOMAS JOSEPH, M.D. 1887	Beverly, Mass.
77 / / 75 75 75 75 75 75 75 75 75 75 75 75 75	Boston, Mass.
77 0 0 10 1001	Boston, Mass.
TT T II 35 D 1001	Wellesley Hills, Mass
HEARD, JOHN THEODORE, M.D. 1859	Boston, Mass.
TT 5 1000	New York, N.Y.
TY C 3ET 100M	New York, N.Y.
77 77 76 76 76 76 76 76 76 76 76 76 76 7	Danielsonville, Conn.
	Boston, Mass.
T 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Boston, Mass.
HILL, JOHN BOGARDUS, M.D. 1852	Cambridge, Mass.
TT 1 TT 35 TO 1000	Dedham, Mass.
HODGES, EDWARD FRANCIS, M.D. 1888	•
TT D M 34 D 1070	Indianapolis, Ind. Boston, Mass.
	,
Hodges, William Donnison, M.D. 1881	Boston, Mass.
HOLBROOK, WILLIAM EDWARD, M.D. 1879 .	Lynn, Mass.
HOLCOMBE, CHARLES HENRY, M.D. 1886	Brookline, N.H.
Holden, Charles Sumner, M.D. 1883	Attleboro, Mass.
Holden, Francis Marion, M.D. 1884	Philadelphia, Pa.
HOLMES, HENRY ELMER, M.D. 1885	Minneapolis, Minn.
HOLMES, HOWLAND, M.D. 1848	Lexington, Mass.
HOLMES, JOHN PARKER, M.D. 1887	Milford, Mass.
Holmes, William Dennison, M.D. 1882	Charlestown, Mass.
Holt, Edward Brown, M.D. 1868	Lowell, Mass.
Holyoke, Frank, M.D. 1863	Holyoke, Mass.
Holyoke, William Cook, M.D. 1872	Boston, Mass.
Homans, John, M.D. 1862	Boston, Mass.
Homans, John, 2d, M.D. 1882	Boston, Mass.
Homer, John, M.D. 1865	Newburyport, Mass.
HOOKER, CHARLES PARKER, M.D. 1879	Springfield, Mass.
HOOKER, EDWARD DWIGHT, M.D. 1884	Arlington, Mass.

HOOPER, FRANKLIN HENRY, M.D. 1877	Boston, Mass.
HOOPER, HENRY, M.D. 1869	Chicago, Ill.
HOPKINS, ELISHA, M.D. 1854	Searsport, Me.
Hosmer, Charles Edward, M.D. 1867	South Billerica, Mass.
Howard, Arthur Chadwick, M.D. 1877	Boston, Mass.
HOWARD, HERBERT BURR, M.D. 1884	Tewksbury, Mass.
Howe, Francis Augustine, M.D. 1854	Newburyport, Mass.
Howe, James Sullivan, M.D. 1881	Boston, Mass.
Howe, Oliver Hunt, M.D. 1886	Cohasset, Mass.
HUBBARD, CHARLES THACHER, M.D. 1861	Taunton, Mass.
HUBBARD, RUFUS PEABODY, M.D. 1883	Boston, Mass.
Hun, Henry, M.D. 1879	Albany, N.Y.
HUNT, WILLIAM OTIS, M.D. 1877	Newtonville, Mass.
HUNTING, NATHANIEL STEVENS, M.D. 1889 .	Quincy, Mass.
HURLEY, DANIEL BARTHOLOMEW, M.D. 1887.	East Boston, Mass.
HUSE, GEORGE WOOD, M.D. 1883	Tombstone, Ariz.
HUSE, RALPH CROSS, M.D. 1866	Georgetown, Mass.
HYDE, GEORGE SMITH, M.D. 1856	Boston, Mass.
HYLAND, JESSE BURDETTE, M.D. 1884	Keene, N.H.
,	,
Inches, Charles Edward, M.D. 1865	Boston, Mass.
Ingalls, William, M.D. 1886	Boston, Mass.
JACK, EDWIN EVERETT, M.D. 1887	Boston, Mass.
JACK, ERNEST SANFORD, M.D. 1886	Melrose, Mass.
JACK, FREDERICK LAFAYETTE, M.D. 1884	Boston, Mass.
JACESON, ALTON ATWELL, M.D. 1883	East Jefferson, Me.
Jackson, Henry, M.D. 1884	Boston, Mass.
Jackson, James Marsh, M.D. 1891	Boston, Mass.
Jackson, William Benjamin, M.D. 1880	Lowell, Mass.
Jackson, William Lravitt, M.D. 1876	Roxbury, Mass.
Jacobs, Henry Barton, M.D. 1887	Baltimore, Md.
JAQUES, HENRY PERCY, M.D. 1880	Milton, Mass.
Jarvis, John Furness, M.D. 1858	Boston, Mass.
Jarvis, Leonard, M.D. 1882	Claremont, N.H.
JARVIS, WILLIAM FURNESS, M.D. 1880	Waltham, Mass.
JEFFERSON, HERBERT PERRY, M.D. 1880	Lowell, Mass.
Jeffries, Benjamin Joy, M.D. 1857	Boston, Mass.
JELLY, GEORGE FREDERICK, M.D. 1868	Boston, Mass.
Jenkins, George Oscar, M.D. 1874	South Boston, Mass.
JENKS, THOMAS LEIGHTON, M.D. 1854	Boston, Mass.
JILLSON, FRANKLIN CAMPBELL, M.D. 1886	West!Roxbury, Mass.
Johnson, Amos Howe, M.D. 1865	Salem, Mass.
Johnson, Frank Mackie, M.D. 1883	Boston, Mass.
JOHNSON, FREDERICK WILLIAM, M.D. 1881.	Boston, Mass.

JOHNSON, WILLIAM LOUIS, M.D. 1878 Uxbridge, Mass. JONAH, JOHN MARINER, M.D. 1860. Eastport, Me. JONES, GEORGE HOWARD, M.D. 1864 . Boston, Mass. JONES, GEORGE WARREN, M.D. 1872 Cambridgeport, Mass. JONES, GILBERT NORRIS, M.D. 1888 . Gloucester, Mass. Jones, Lyman Asa, M.D. 1891 . . . Roslindale, Mass. JORDAN, GEORGE ALBERT, M.D. 1872. Worcester, Mass. KALES, JOHN DAVIS, M.D. 1887 Chicago, Ill. KAUFMAN, FRANKLIN JOHN, M.D. 1887 Syracuse, N.Y. KEENE, GEORGE FREDERICK, M.D. 1879 . Howard, R.I. KEITH, WALLACE CUSHING, M.D. 1884 . Brockton, Mass. KELLEY, GEORGE WALLACE, M.D. 1878. Barnstable, Mass. KEMBLE, LAURENCE GRAFTON, M.D. 1883 . Salem, Mass. KENEFICK, JOSEPH ALOYSIUS, M.D. 1890 Boston, Mass. KENNEDY, FREDERICK WILLIAM, M.D. 1883. Lawrence, Mass. KENNEDY, GEORGE GOLDING, M.D. 1867 Roxbury, Mass. KENT, JOHN BRYDEN, M.D. 1869 Putnam, Conn. KEYES, HENRY MITCHELL, M.D. 1870. Stapleton, N.Y. KIBBEY, WILLIAM BECKFORD, M.D. 1882 Marshalltown, Ia. KILBURN, HENRY WHITMAN, M.D. 1884. Boston, Mass. KILBY, HENRY SHERMAN, M.D. 1878 . . North Attleboro, Mass. KILROY, PHILIP, M.D. 1888 Springfield, Mass. KIMBALL, GEORGE MORRILL, M.D. 1884 . . Concord. N.H. Kimpton, Edwin Sewell, M.D. 1887 . . . Charlestown, Mass. King, Stephen Henry, M.D. 1872. . . Providence, R.I. King, William Rufus, M.D. 1890. Lynn, Mass. KITTREDGE, JOSEPH, M.D. 1880 Brookline, Mass. KNAPP, PHILIP COOMBS, M.D. 1888 Boston, Mass. Boston, Mass. KNIGHT, AUGUSTUS SMITH, M.D. 1890 KNIGHT, BENJAMIN, M.D. 1869 . . . Santa Cruz, Cal. KNIGHT, FREDERICK IRVING, M.D. 1866. Boston, Mass. Knowles, William Fletcher, M.D. 1885. Boston, Mass. LAMSON, JOHN AUGUSTUS, M.D. 1856 Boston, Mass. LANCASTER, WALTER BRACKETT, M.D. 1889 Boston, Mass. LANE, EDWARD BINNEY, M.D. 1885 Dorchester, Mass. LANGMAID, SAMUEL WOOD, M.D. 1864 Boston, Mass. LARABEE, GEORGE HERMAN, M.D. 1864 . . Suncook, N.H. East Cambridge, Mass. LATIMER, JAMES ABERCROMBIE, M.D. 1873 LAWLER, THOMAS JOSEPH, M.D. 1882 Boston, Mass. LEACH, WILLIAM, M.D. 1856 Vineyard Haven, Mass. LEAVITT, BYRON CHARLES, M.D. 1887 Denver, Col. LEAVITT, ERASMUS DARWIN, M.D. 1870 . . . Butte, Mon.

LEITCH, JOHN ALVIN, M.D. 1887

Andover, Mass.

LELAND, GEORGE ADAMS, M.D. 1878	Boston, Mass.
LEWIS, EDWIN RUFUS, M.D. 1867	Indianapolis, Ind.
LEWIS, WILLIAM ALBERT, M.D. 1851	Moosup, Conn.
LILIENTHAL, HOWARD, M.D. 1887	New York, N.Y.
LINCOLN, ARTHUR TALBOT, M.D. 1889	Dennysville, Me.
Lincoln, David Francis, M.D. 1864	Geneva, N.Y.
LINCOLN, JACOB READ, M.D. 1888	Millbury, Mass.
LINCOLN, RUFUS PRATT, M.D. 1868	New York, N.Y.
LITCHFIELD, WILLIAM HARVEY, M.D. 1882 .	Hull, Mass.
LOCKE, HORACE MANN, M.D. 1886	Brockton, Mass.
LOMBARD, WARREN PLIMPTON, M.D. 1882 .	Worcester, Mass.
LOPEZ, RAFAEL, M.D. 1877	Waterbury, Conn.
LORING, ROBERT PEARMAIN, M.D. 1875	Newton Centre, Mass.
Louis, Isaac, M.D. 1885	Boston, Mass.
LOVEJOY, CHARLES AVERILL, M.D. 1872	Lynn, Mass.
LOVETT, ROBERT WILLIAMSON, M.D. 1885	Boston, Mass.
Lux, Frederick William, M.D. 1885	San Francisco, Cal.
Lyman, Charles Baldwin, M.D. 1886	Denver, Col.
Lyon, Henry, M.D. 1838	Charlestown, Mass.
Lyons, Herbert Henry, M.D. 1881	Fitchburg, Mass.
Lyons, William Henry Aloysius, M.D. 1890	Manchester, N.H.
MACDONALD, RUFUS CYRENE, M.D. 1883	Boston, Mass.
MacDonald, William Gregory, M.D. 1885.	Boston, Mass.
MACDONALD, WILLIAM LEWIS, M.D. 1865	Boston, Mass.
MACFARLAND, MATHEW LAW, M.D. 1872	Fairville, N.B.
Mack, William, M.D. 1838	Salem, Mass.
MACKAYE, HENRY GOODWIN, M.D. 1885	Newport, R.I.
MACKIE, WILLIAM BASILIO, M.D. 1862	Boston, Mass.
Mackin, Charles, M.D. 1866	Milford, Mass.
MacMonagle, Beverly, M.D. 1876	San Francisco, Cal.
Macpherson, Frederic William, M.D. 1871	Swampscott, Mass.
Mahoney, John Bernard, M.D. 1887	Medford, Mass.
MAHONEY, JOHN FRANCIS, M.D. 1887	Chelsea, Mass.
MAHONEY, STEPHEN ANDREW, M.D. 1889	Holyoke, Mass.
MALLORY, FRANK BURR, M.D. 1890	Boston, Mass.
MANN, FREDERIC PORTER, M.D. 1848	San Francisco, Cal.

MANSFIELD, HENRY TUCKER, M.D. 1869 . . Needham, Mass. MANSFIELD, JOHN ROBBINS, M.D. 1859 . . . Wakefield, Mass. MANTON, WALTER PORTER, M.D. 1881 . . . Detroit, Mich.

MARSTERS, GEORGE W, M.D. 1865 Cawker City, Kan.

MARSTON, ENOCH QUIMBY, M.D. 1876 . . . Sandwich Centre, N.H.

MARTIN, FRANCIS COFFIN, M.D. 1883 . . . Roxbury, Mass.

MARCY, HENRY ORLANDO, M.D. 1864 MARION, OTIS HUMPHREY, M.D. 1878

. . . Boston, Mass.

. . . Allston, Mass.

Brookline, Mass. MARTIN, STEPHEN CROSBY, M.D. 1874 MASON, AMOS LAWRENCE, M.D. 1872. Boston, Mass. Mason, Jarvis King, M.D. 1861 Suffield, Conn. MASON, WILLIAM CASTEIN, M.D. 1878 Bangor, Me. MAYNARD, JOHN PARKER, M.D. 1848. Dedham, Mass. Cambridgeport, Mass. McCarthy, Eugene Allan, M.D. 1887 McCarthy, Thomas Horatio, M.D. 1890 . North Easton, Mass. McCarty, James Joseph, M.D. 1878. . . Lowell, Mass. McClean, George Chesley, M.D. 1875 Springfield, Mass. McCollom, John Hildreth, M.D. 1869 Boston, Mass. McCormick, Cornelius Joseph, M.D. 1876 Waltham, Mass. McDonald, John Ban, M.D. 1865 Centralia, Wash. McGlynn, Edward, M.D. 1886 Roxbury, Mass. McKinnon, John Cameron, M.D. 1871 . Antigonish, N.S. McMann, John Joseph, M.D. 1867 Lynn, Mass. McMichael, Willis Brooks, M.D. 1881 East Boston, Mass. McNally, William Joseph, M.D. 1887 Charlestown, Mass. McNary, Hugh Flournoy, M.D. 1863. Princeton, Kv. McOwen, Timothy Edward, M.D. 1885 Lowell, Mass. Mass. McOwen, William Henry, M.D. 1883 . Newton Upper Falls, McQueeney, Francis Joseph, M.D. 1890 . Boston, Mass. McSwain, Angus, M.D. 1873 Santa Clara, Cal. MEAD, GEORGE NATHANIEL PLUMER, M.D. 1886 Everett, Mass. MEAD, JULIAN AUGUSTUS, M.D. 1881 Watertown, Mass. MEADER, CHARLES EUGENE, M.D. 1879 Lynn, Mass. MECUEN, GEORGE EDWARD, M.D. 1875 Boston, Mass. MERRIAM, JOSEPH WAITE, M.D. 1862. Iquique, Chile. MILLER, GEORGE NORTON, M.D. 1882 New York, N.Y. MILLER, HORACE GEORGE, M.D. 1865. Providence, R.I. MILLET, CHARLES SUMNER, M.D. 1880 Rockland, Mass. MILLIKEN, CHARLES JAMES, M.D. 1866 Cherryfield, Me. MILLS, GEORGE WESTGATE, M.D. 1879 Medford, Mass. MINOT, FRANCIS, M.D. 1844 . . . Boston, Mass. MINOT, JAMES JACKSON, M.D. 1878 Boston, Mass. MIXTER, SAMUEL JASON, M.D. 1879 Boston, Mass. MOFFETT, FRANK TIFFT, M.D. 1870 Littleton, N.H. Monks, George Howard, M.D. 1880. Boston, Mass. Moran, John Brennan, M.D. 1864 Boston, Mass. MORONEY, WILLIAM JOSEPH, M.D. 1890 Roxbury, Mass. MORRILL, FERDINAND GORDON, M.D. 1869. Boston, Mass. Morris, James Stewart, M.D. 1888 . . . Revere, Mass. MORRIS, MICHAEL AUGUSTUS, M.D. 1873 Charlestown, Mass. MORRISON, WILLIAM ALEXANDER, M.D. 1889. East Boston, Mass. Morse, Charles Francis, M.D. 1889 Chelsea, Mass. Morse, Edward Gilead, M.D. 1870 Roxbury, Mass.

Morse, John Alline W., M.D. 1864	South Ohio, N.S.
Morse, Leander Rupert, M.D. 1860	Lawrencetown, N.S.
MORTON, WILLIAM JAMES, M.D. 1872	New York, N.Y.
Moseley, William Edward, M.D. 1874	Baltimore, Md.
Moulton, Benjamin Francis, M.D. 1867	Lawrence, Mass.
Mumford, James Gregory, M.D. 1890	
Munro, John Cummings, M.D. 1885	Boston, Mass.
MURPHY, DANIEL FRANCIS, M.D. 1887	Woburn, Mass.
MURPHY, FRANCIS CHARLES, M.D. 1886	Roxbury, Mass.
MURPHY, JOSEPH BRIGGS, M.D. 1883	Taunton, Mass.
MUSGROVE, THOMAS WILLIAM, M.D. 1871	Puyallup, Wash.
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Nash, George William, M.D. 1884	Cambridge, Mass.
NELSON, ABIEL WARD, M.D. 1861	New London, Conn.
Nelson, David Batchelder, M.D. 1849	Laconia, N.H.
NELSON, SAMUEL NEWELL, M.D. 1882	Revere, Mass.
NEWHALL, HERBERT WILLIAM, M.D. 1884	Lynn, Mass.
NICHOLS, ARTHUR HOWARD, M.D. 1866	Boston, Mass.
NICHOLS, CHARLES LEMUEL, M.D. 1875	Worcester, Mass.
Nichols, John Taylor Gilman, M.D. 1859 .	Cambridge, Mass.
NICKERSON, ASA HARDEN, M.D. 1882	Central Falls, R.L.
Norfolk, Walter Jenks, M.D. 1873	Chicopee Falls, Mass.
Norrie, William, M.D. 1867	West Branch River
•	John, N.S.
NORRIS, ALBERT LANE, M.D. 1865	Cambridgeport, Mass.
NORWOOD, EPHRAIM WOOD, M.D. 1882	Spencer, Mass.
Nottage, Herbert Piercy, M.D. 1886	Westport, Mass.
Noyes, Francis Vergnies, M.D. 1831	Billerica, Mass.
NOYES, WILLIAM, M.D. 1885	Somerville, Mass.
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O'CONNELL, JOHN DAVID, M.D. 1876	Cambridge, Mass.
O'Connor, John James, M.D. 1888	Holyoke, Mass.
O'Donnell, Francis Michael, M.D. 1887	Newton, Mass.
OGDEN, WILLIAM MARTYN, M.D. 1866	Boston, Mass.
OLESON, CHARLES WILMOT, M.D. 1866	Lombard, Ill.
OLIVER, HENRY KEMBLE, M.D. 1855	Boston, Mass.
Oliver, James, M.D. 1862	Athol Centre, Mass.
OLIVER, JOSEPH PEARSON, M.D. 1871	Boston, Mass.
Olloqui, Rufino Agustin de, M.D. 1865	Kingston, N.B.
OSBORNE, GEORGE STERNE, M.D. 1863	Peabody, Mass.
Osgood, George Cowles, M.D. 1866	Lowell, Mass.
OSGOOD, GEORGE EDWARD, M.D. 1887	East Barrington, N.H.
OSMAN, CHARLES FRANKLIN, M.D. 1880	Boston, Mass.
OTIS, EDWARD OSGOOD, M.D. 1877	
Olis, Edward Osciot, M.D. 1011	

PADULA, THOMAS FRANCIS, M.D. 1887 Neponset, Mass. PAGE, CHARLES WHITNEY, M.D. 1870 Danvers, Mass. PAIGE, JOHN DUDLEY, M.D. 1888 South Boston, Mass. PALMER, FRANKLIN SAWYER, M.D. 1890 . Seattle, Wash. PALMER, LEWIS MERRITT, M.D. 1881 . . So. Framingham, Mass. PARKER, SCOLLAY, M.D. 1866 Portland, Oregon. PARSONS, AZARIAH WORTHINGTON, M.D. 1880 Athol, Mass. Parsons, John Eleaser, M.D. 1863 . . . Aver, Mass. Parsons, John William, M.D. 1865 . . . Portsmouth, N.H. PATERSON, EDWARD MORTIMER, M.D. 1871 Oakland, Cal. PAUL, WALTER EVERARD, M.D. 1887 . . . Southbridge, Mass. PAYNE, JAMES HENRY, JR., M.D. 1889 Boston, Mass. Pease, Giles Moseley, M.D. 1863 San Francisco, Cal. PECKHAM, CYRUS TRACY, M.D. 1879 . St. Louis, Mo. Peibce, Warren, M.D. 1869 . . . Plymouth, Mass. Peirson, Edward Lawrence, M.D. 1888 . Salem, Mass. Pelton, Clarence Whitfield, M.D. 1890 Worcester, Mass. PERKINS, EDWARD AUGUSTUS, M.D. 1854 Boston, Mass. PERKINS, GEORGE WILLIAM, M.D. 1886 . . Ogden, Utah. Providence, R.I. PERKINS, JOHN WALTER, M.D. 1886 Kansas City, Mo. Perkins, Thomas Lyman, M.D. 1880. Salem, Mass. Jamaica Plain, Mass. PERRY, ARTHUR PEDRO, M.D. 1886 Perry, John Gardner, M.D. 1863 New York, N.Y. PERRY, JOSEPH FRANKLIN, M.D. 1873 Boston, Mass. Peters, Edward Dyer, Jr., M.D. 1877 Dorchester, Mass. Peters, John Matthews, M.D. 1887. Providence, R.I. Peterson, Reuben, M.D. 1889 . . . Grand Rapids, Mich. PETTENGILL, EDWARD HENRY, M.D. 1866 Saxton's River, Vt. PFEIFFER, OSCAR JOSEPH, M.D. 1884 Denver, Col. PHILLIPS, JERRIE KNOWLTON, M.D. 1885 Bangor, Me. PHIPPEN, HARDY, M.D. 1889 Salem, Mass. PHIPPS, WALTER ANDRUS, M.D. 1878. Hopkinton, Mass. PICKMAN, HERSY DERBY, M.D. 1868 . Dillon, Mon. PIERCE, GARDNER CARPENTER, M.D. 1866 Ashland, Mass. PIERCE, MATTHEW VASSAR, M.D. 1880 . Milton, Mass. PILLSBURY, HARLIN HENRY, M.D. 1859. Auburn, Cal. PINKERTON, THOMAS HAMEL, M.D. 1859 Oakland, Cal. PLIMPTON, LEWIS HENRY, M.D. 1879 . . Norwood, Mass. Pomeroy, William Henry, M.D. 1886 . Springfield, Mass. Porteous, James George, M.D. 1866 Poughkeepsie, N.Y. PORTER, CHARLES BURNHAM, M.D. 1865 Boston, Mass. PORTER, FRANCIS EDWARD, M.D. 1873 Auburndale, Mass. Post, Abner, M.D. 1870 Boston, Mass. POTTER, ALBERT, M.D. 1855 . . Chepacket, R.I.

Powers, George Herman, M.D. 1865 San Francisco, Cal. PRATT, JOHN WASHBURN, M.D. 1886. Boston, Mass. Preble, Wallace, M.D. 1883 . . Cambridge, Mass. PRESBREY, SILAS DEAN, M.D. 1865 Taunton, Mass. PRESCOTT, WILLIAM HERBERT, M.D. 1888 . Boston, Mass. PRESTON, JOSEPH WILLIAM, M.D. 1850 . . Great Falls, N.H. PRINCE, MORTON HENRY, M.D. 1879 . Boston, Mass. PRIOR, CHARLES EDWIN, M.D. 1882 Malden, Mass. PRITTIE, WILLIAM HENRY, M.D. 1868 . . . Chicago, Ill. PUTNAM, CHARLES PICKERING, M.D. 1869 . . Boston, Mass. Boston, Mass. Putnam, James Jackson, M.D. 1870 PUTNEY, GEORGE ELLIS, M.D. 1876 . . Royalton, Minn. QUIMBY, ELISHA HERVEY, M.D. 1863 Malden, Mass. QUIMBY, SAMUEL FOSTER, M.D. 1864. Salem, Mass. QUINCY, HENRY PARKER, M.D. 1867 . Dedham, Mass. West Medway, Mass. QUINT, NORMAN PERKINS, M.D. 1870. RANDALL, JOHN NEWTON, M.D. 1867 . . Decatur, Ill. REMINGTON, FREDERIC, M.D. 1888 Rochester, Mass. REYNOLDS, EDWARD, M.D. 1885 Boston, Mass. REYNOLDS, HENRY, M.D. 1869 . . Livermore Falls, Me. RICE, CHARLES HENRY, M.D. 1866 Fitchburg, Mass. RICHARDS, GEORGE EDWARD, M.D. 1883 Boston, Mass. RICHARDSON, DANA PUTNAM, M.D. 1882 Newtown, Conn. RICHARDSON, LEONARD EDMUND, M.D. 1857. Hartford, Conn. RICHARDSON, MAURICE HOWE, M.D. 1877 . . Boston, Mass. RICHARDSON, WILLIAM LAMBERT, M.D. 1867. Boston, Mass. RICHARDSON, WILLIAM SHEDD, M.D. 1884. Marlboro, Mass. RIPLEY, FRED. JEROME, M.D. 1883 Brockton, Mass. ROBBINS, ELLIOTT DANIEL, M.D. 1879 Charlestown, Mass. ROBBINS, JAMES HENRY, M.D. 1867 Hingham, Mass. ROBBINS, NATHANIEL ALDEN, M.D. 1864 Brooklyn, N.Y. ROBINSON, JOHN FRANKLIN, M.D. 1886 . Manchester, N.H. Robinson, John Lombard, M.D. 1859 Manchester, N.H. ROBINSON, ROWLAND RODMAN, M.D. 1888 . Wakefield, R.I. ROGERS, JOHN CONWAY, M.D. 1864 . . Pembroke, Me. ROLFE, WILLIAM ALFRED, M.D. 1890 Boston, Mass. Stoughton, Mass. Rose, Daniel Campbell, M.D. 1869 Ross, Carroll Baldwin, M.D. 1886. West Rutland, Vt. ROTCH, THOMAS MORGAN, M.D. 1874 Boston, Mass. Boston, Mass. Rowe, George Howard Malcolm, M.D. 1868 RUDDICK, WILLIAM HENDERSON, M.D. 1868 . South Boston, Mass. RUPPANNER, ANTHONY, M.D. 1857 New York, N.Y. RYDER, GODFREY, M.D. 1880 Malden, Mass.

SABINE, GEORGE KRANS, M.D. 1873 Brookline, Mass. SARGENT, GEORGE AMORY, M.D. 1888 Boston, Mass. SAUNDERS, LEVI, M.D. 1857 Gloucester, Mass. SAWIN, CHARLES DEXTER, M.D. 1883 Charlestown, Mass. SAWYER, BENJAMIN ADDISON, M.D. 1865 Haverhill. Mass. SAWYER, EDWARD WARREN, M.D. 1873. Chicago, Ill. SAWYER, FREDERIC AUGUSTUS, M.D. 1856. Wareham, Mass. SAWYER, WILLIAM BREWSTER, M.D. 1879 Riverside, Cal. SCANNELL, MICHAEL EDWARD, M.D. 1891 Lawrence, Mass. Scofield, Columbus Sewell, M.D. 1883 Boston, Mass. SCUDDER, CHARLES LOCKE, M.D. 1888 Boston, Mass. SEARS, GEORGE GRAY, M.D. 1885 . . . Boston, Mass. SEARS, HENRY FRANCIS, M.D. 1887 Boston, Mass. SEAVERNS, JOEL, M.D. 1854 Roxbury, Mass. SENTON, BENJAMIN CLARENCE, M.D. 1871 Rutland, Vt. SEYMOUR, WILLIAM WOTEYNS, M.D. 1878 . . Troy, N.Y. SHACKFORD, CHARLES HARRISON, M.D. 1849 . Chelsea, Mass. SHARKEY, JAMES MICHAEL, M.D. 1849 . . . San Francisco, Cal. SHATTUCK, FREDERICK CHEEVER, M.D. 1873 . Boston, Mass. SHATTUCK, GEORGE BRUNE, M.D. 1869 . . . Boston, Mass. SHATTUCK, HENRY PERKINS, M.D. 1866. Brooklyn, N.Y. Shaw, Benjamin Shurtleff, M.D. 1850 Boston, Mass. SHAW, HENRY LYMAN, M.D. 1859 . . . Boston, Mass. SHEA, ANDREW FRANCIS, M.D. 1882 . . . Lawrence, Mass. SHELDON, CHAUNCEY COOLEY, M.D. 1877 Lvnn, Mass. SHERBURNE, ANDREW BADGER, M.D. 1871. Portsmouth, N.H. SHERMAN, FRANK MORTON, M.D. 1881 Newton L. Falls, Mass. SHERMAN, THOMAS FOSTER, M.D. 1881 . Boston, Mass. SHURTLEFF, AUGUSTINE, M.D. 1849 Brookline, Mass. SHURTLEFF, BENJAMIN, M.D. 1848 Napa, Cal. SIMMONS, GUSTAVUS CROCKER, M.D. 1885 Sacramento, Cal. Sacramento, Cal. SIMMONS, GUSTAVUS LINCOLN, M.D. 1856 SINCLAIR, ALEXANDER DOULL, M.D. 1857 Boston, Mass. SKINNER, EDWARD MANNING, M.D. 1862 Jamaica Plain, Mass. SKINNER, RICHARD BAXTER, M.D. 1858 . . . Barton, Vt. SLADE, DANIEL DENISON, M.D. 1848 . . Chestnut Hill, Mass. SMITH, HERBERT LLEWELLYN, M.D. 1887 Boston, Mass. SMITH, JONATHAN JASON, M.D. 1879 . . . Boston, Mass. SMITH, SHEFFIELD, M.D. 1877 Providence, R.I. SOUTHARD, WILLIAM FREEMAN, M.D. 1872 Oakland, Cal. SOUTHER, WILLIAM TOWLE, M.D. 1878 . . Worcester, Mass. Lowell, Mass. Spalding, Charles Parker, M.D. 1877 SPEAR, EDMUND DOE, M.D. 1874 Boston, Mass. SPOONER, JOHN WINTHROP, M.D. 1871 . . . Hingham, Mass. SPRAGUE, RICHARD, M.D. 1887 Boston, Mass.

C D W W D 1071	Observations Management
SPRAGUE, RUFUS WILLIAM, M.D. 1871 SPRING, CLARENCE WALTER, M.D. 1884	Charlestown, Mass. Fitchburg, Mass.
Squires, Harry Sanford, M.D. 1881	Aguascalientes, Mex.
STANDISH, MYLES, M.D. 1879	Boston, Mass.
STEARNS, JOHN, M.D. 1860	Washington, D.C.
STEDMAN, CHARLES ELLERY, M.D. 1855	Dorchester, Mass.
STEDMAN, GEORGE, M.D. 1875	Boston, Mass.
STEDMAN, HENRY RUST, M.D. 1875	Roslindale, Mass.
STEVENS, ANDREW JACKSON, M.D. 1869	Malden, Mass.
STEVENS, CALVIN, M.D. 1845	Boston, Mass.
STEVENS, CHARLES WISTAR, M.D. 1870	Charlestown, Mass.
STEVENS, EDMUND HORACE, M.D. 1867	N. Cambridge, Mass.
STEVENS, GEORGE BECKWITH, M.D. 1870	Roxbury, Mass.
STEVENS, LEWIS TEBBETTS, M.D. 1887	St. Louis, Mo.
STEVENS, WILLIAM STANFORD, M.D. 1883	Boston, Mass.
STICKNEY, GEORGE AUGUSTUS, M.D. 1882	Beverly, Mass.
STILL, JAMES THOMAS, M.D. 1871	Boston, Mass.
STOCKER, ALFRED AUGUSTUS, M.D. 1853	Cambridgeport, Mass.
STOCKWELL, CHARLES BLISS, M.D. 1878	Port Huron, Mich.
STONE, ARTHUR KINGSBURY, M.D. 1888	Boston, Mass.
STONE, CHARLES SINCLAIR, M.D. 1886	Boston, Mass.
STONE, LINCOLN RIPLEY, M.D. 1854	Newton, Mass.
STORER, HORATIO ROBINSON, M.D. 1853	Newport, R.I.
STORER, MALCOLM, M.D. 1889	Boston, Mass.
STRAW, Amos Gale, M.D. 1890	Manchester, N.H.
STREET, CHARLES CARROLL, M.D. 1861	Boston, Mass.
STRONG, CHARLES PRATT, M.D. 1881	Boston, Mass.
STUART, FREDERIC WILLIAM, M.D. 1884	South Boston, Mass.
STURGIS, FREDERIC RUSSELL, M.D. 1867	New York, N.Y.
STURGIS, RUSSELL, M.D. 1881	Boston, Mass.
Sullivan, John Langdon, M.D. 1849	Malden, Mass.
SUTHERLAND, MURDO, M.D. 1871	Westville, N.S.
SWAN, CHARLES WALTER, M.D. 1864	Boston, Mass.
SWAN, WILL HOWARD, M.D. 1891	Boston, Mass.
SWAN, WILLIAM DONNIBON, M.D. 1885	Cambridge, Mass.
Swan, William Ellery Channing, M.D. 1865	Stoughton, Mass.
SWARTS, GARDNER TABER, M.D. 1879	Providence, R.I.
SWEENEY, HILARY TUCKER, M.D. 1889	East Boston, Mass.
SWEENY, HENRY LEE, M.D. 1882	Kingston, N.H.
SWIFT, JOHN BAKER, M.D. 1877	Boston, Mass.
SWIFT, WILLIAM NYE, M.D. 1881	New Bedford, Mass.
SYMONDS, BENJAMIN ROPES, M.D. 1883	Salem, Mass.
TAFT, CHARLES EZRA, M.D. 1886	Hartford, Conn.
Talbot, Ambrose, M.D. 1885	Kansas City, Mo.

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TALBOT, ISRAEL TISDALE, M.D. 1854 Boston, Mass. TARBELL, GEORGE GROSVENOR, M.D. 1865. Boston, Mass. TAYLOR, CHARLES WARREN, M.D. 1884 . . . Lowell, Mass. TAYLOR, EDWARD WYLLYS, M.D. 1891 . . Montclair, N.J. TAYLOR, FREDERIC WESTON, M.D. 1882 N. Cambridge, Mass. TAYLOR, VERNON OTIS, M.D. 1868 . . . Providence, R.I. TEMPLE, WILLIAM FRANKLIN, M.D. 1881 Boston, Mass. TENNEY, ASA PEASLEE, M.D. 1859 Kansas City, Kan. TERRELL, FREDERICK, M.D. 1881 San Antonio, Tex. TERRY, CHARLES CHURCH, M.D. 1884 Fall River, Mass. TERRY, HERBERT, M.D. 1880 Providence, R.I. THAYER, ADDISON SANFORD, M.D. 1888 Portland, Me. THAYER, FREDERICK LYMAN, M.D. 1871 West Newton, Mass. THAYER, WILLIAM HENRY, M.D. 1844 Brooklyn, N.Y. THAYER, WILLIAM SYDNEY, M.D. 1889 Baltimore, Md. THISSELL, JOSEPH ABBOTT, M.D. 1885 Beverly, Mass. THOMAS, FLAVEL SHURTLEFF, M.D. 1874 Hanson, Mass. THOMPSON, FREDERICK HENRY, M.D. 1870 Fitchburg, Mass. THOMPSON, GEORGE EBEN, M.D. 1884 Boston, Mass. THOMPSON, JOHN McQUAID, M.D. 1889 . Boston, Mass. THORNDIKE, AUGUSTUS, M.D. 1888 Boston, Mass. THORNDIKE, PAUL, M.D. 1888 Boston, Mass. THURLOW, JOHN HOWARD, M.D. 1881 Roxbury, Mass. Tinkham, Granville Wilson, M.D. 1871. Weymouth, Mass. TITCOMB, GEORGE EUGENE, M.D. 1881 . . . Concord, Mass. Tobey, James Edwin, M.D. 1872 Central Falls, R.I. Towar, George Washington, Jr., M.D. 1858 Detroit, Mich. Tower, Charles Bates, M.D. 1881 Cambridge, Mass. Tower, Charles Carroll, M.D. 1859 . . S. Weymouth, Mass. Townsend, Charles Wendell, M.D. 1885 Boston, Mass. Townsend, George James, M.D. 1846 . . South Natick, Mass. TRACY, EDWARD ALOYSIUS, M.D. 1891 South Boston, Mass. TRACY, WILLIAM CLINTON, M.D. 1866 Toledo, Ohio. TREMAINE, WILLIAM ALLEN, M.D. 1883. Providence, R.I. TRUE, HERBERT OSGOOD, M.D. 1886 . . Pawtucket, R.I. Tuck, Henry, M.D. 1867 New York, N.Y. TUCKER, ERNEST FANNING, M.D. 1884 Portland, Oregon. Tucker, James Ioannas, M.D. 1867. Chicago, Ill. TUCKERMAN, FREDERICK, M.D. 1882 . Amherst, Mass. TUPPER, AUGUSTUS MACLAUCHLAN, M.D. 1870 Rockport, Mass. TUTTLE, ALBERT HENRY, M.D. 1886 Cambridgeport, Mass. TUTTLE, GEORGE THOMAS, M.D. 1878 Somerville, Mass. TWITCHELL, EDWARD THAYER, M.D. 1886. Dorchester, Mass. TWITCHELL, GEORGE PIERCE, M.D. 1882 Greenfield, Mass.

Underhill, Charles Dudley, M.D. 1888 . . . Boston, Mass. Underwood, George Latham, M.D. 1858 Boston, Mass. URIE, JOHN FRANCIS, M.D. 1888 Charlestown, Mass. UTLEY, EDWARD ROSWELL, M.D. 1891 Newton, Mass. VAUGHAN, CHARLES EVERETT, M.D. 1863 . Cambridge, Mass. VICKERY, HERMAN FRANK, M.D. 1882 Boston, Mass. VILES, CLARENCE ALBERT, M.D. 1878 Lowell, Mass. WADE, EDRIC ALLAN, M.D. 1879 Salem Depot, N.H. WADSWORTH, OLIVER FAIRFIELD, M.D. 1865 Boston, Mass. WAKEFIELD, ADONIRAM JUDSON, M.D. 1855 Jacksonville, Fla. WALKER, AUGUSTUS CHAPMAN, M.D. 1866. Greenfield, Mass. WALKER, JAMES PARKER, M.D. 1856 . . . Manchester, N.H. WALKER, JOHN BALDWIN, M.D. 1888 . . . Cleveland, Ohio. WALKER, MAURICE ANSON, M.D. 1891 . . Boston, Mass. Walsh, Edmund, M.D. 1873 East Cambridge, Mass. WALSH, FRANK WINFIELD, M.D. 1885 Boston, Mass. WALTON, ALFRED, M.D. 1879 New York, N.Y. WALTON, GEORGE LINCOLN, M.D. 1880 . . Boston, Mass. Northfield, Mass. WARD, ROLLIN CLAYTON, M.D. 1870 WARDWELL, WILLIAM TECUMSEH SHERMAN, Roslindale, Mass. WARREN, CHARLES EVERETT, M.D. 1883 Boston, Mass. WARREN, EDWARD WINSLOW, M.D. 1883 Ansonia, Conn. WARREN, JOHN COLLINS, M.D. 1866 . . Boston, Mass. WASHBURN, GEORGE HAMLIN, M.D. 1886 Boston, Mass. WATERMAN, THOMAS, M.D. 1868 Boston, Mass. WATSON, FRANCIS SEDGWICK, M.D. 1879 Boston, Mass. WEBBER, ALONZO CARTER, M.D. 1849 Cambridge, Mass. WEBBER, FREDERICK WARD, M.D. 1879. Newton, Mass. WEBBER, GEORGE CLARK, M.D. 1863 . . . Millbury, Mass. WEBBER, SAMUEL GILBERT, M.D. 1865 . . Boston, Mass. Webster, George Arthur, M.D. 1889 . . . Boston, Mass. WEBSTER, JOHN CALVIN, M.D. 1867. . . Chicago, Ill. WEBSTER, JOHN ORDWAY, M.D. 1868 . . . Augusta, Me. Mass. WEIL, FRANK EDWARD, M.D. 1882 N. Andover Depot, WELD, FRANCIS MINOT, M.D. 1864 Jamaica Plain, Mass. WELLINGTON, WILLIAM WILLIAMSON, M.D. 1838 Cambridgeport, Mass. Boston, Mass. WESSELHOEFT, CONRAD, M.D. 1856 WESSELHOEFT, WALTER, M.D. 1859 Cambridge, Mass. West, Edward Graeff, M D. 1880 Roxbury, Mass. WETHERBEE, ROSWELL, M.D. 1882 Cambridgeport, Mass. WETHERELL, ARTHUR BRYANT, M.D. 1888. Holyoke, Mass. WHEATON, CHARLES AUGUSTUS, M.D. 1877 St. Paul, Minn.

WHEATON, ROBERT ARCHIBALD, M.D. 1890 St. Paul. Minn. WHEELER, JOHN BROOKS, M.D. 1879 . . Burlington, Vt. WHEELER, LEONARD, M.D. 1870 Worcester, Mass. WHEELER, MORRIS PLUMER, M.D. 1874 Dorchester, Mass. WHIDDEN, PHILON CURRIER, M.D. 1866 Chicago, Ill. WHISTON, EDWARD ANDERM, M.D. 1861 Newtonville, Mass. WHITAKER, JOHN BIRTWISTLE, M.D. 1867 . Fall River, Mass. WHITE, EMORY LINCOLN, M.D. 1872 . . Somerville, Mass. WHITE, HERBERT WARREN, M.D. 1880 Roxbury, Mass. WHITE, JAMES CLARKE, M.D. 1856. . Boston, Mass. WHITE, LUTHER ROBINSON, M.D. 1878 . Scandia, Kan. WHITE, WILLIAM ROBBINS, M.D. 1877 Providence, R.I. WHITMAN, ROYAL, M.D. 1882 . . . New York, N.Y. WHITMORE, LORENZO LOCKE, M.D. 1851 N. Ashburnham, Mass. WHITNEY, CHARLES MELVILLE, M.D. 1887. Boston, Mass. WHITNEY, HERBERT BAKER, M.D. 1882 . . . Denver, Col. WHITNEY, WILLIAM FISKE, M.D. 1875 Boston, Mass. Whitridge, Roland Barker, M.D. 1883 Boston, Mass. WHITTEMORE, FREDERIC WEBSTER, M.D. 1878 Cambridge, Mass. WHITTIER, EDWARD NEWTON, M.D. 1869 Boston, Mass. WHITTIER, SAMUEL CROOK, M.D. 1862 Portsmouth, N.H. Whitwell, William Scollay, M.D. 1872 San Francisco, Cal. WIGGLESWORTH, EDWARD, M.D. 1865 Boston, Mass. WILBUR, HUBERT GRANVILLE, M.D. 1890 Fall River, Mass. WILBUR, JOSHUA GREEN, M.D. 1862 . . . Brooklyn, N.Y. WILLIAMS, CHARLES CROSBY, M.D. 1886. Boston, Mass. WILLIAMS, FRANCIS HENRY, M.D. 1877. Boston, Mass. WILLIAMS, HAROLD, M.D. 1878 Boston, Mass. WILLIAMS, JACOB LAFAYETTE, M.D. 1848 . Boston, Mass. WILLIAMS, WILLIAM FREDERICK, M.D. 1889 Bristol, R.I. WILLIS, JOHN WARREN, M.D. 1861 Waltham, Mass. WILLIS, REUBEN, M.D. 1867 Somerville, Mass. WILMARTH, FREDERICK AUGUSTUS, M.D. 1888 Milford, Mass. WILSON, CHARLES ALONZO, M.D. 1869 St. Louis, Mo. WILSON, JOHN HARPIN, M.D. 1881 Chicago, Ill. WINN, CHARLES HENRY, M.D. 1888 Winchester, Mass. Winslow, Kenelm, M.D. 1891 . . . Newton, Mass. WOOD, ALBERT, M.D. 1862 Worcester, Mass. WOOD, EDWARD STICKNEY, M.D. 1871 Boston, Mass. Wood, Henry Austen, M.D. 1883 Waltham, Mass. Worcester, Mass. Woodbury, George Franklin, M.D. 1882 WOODBURY, LOUIS AUGUSTUS, M.D. 1872 . Groveland, Mass. WOODMAN, WALTER, M.D. 1883 Cambridge, Mass. WOODWARD, LEMUEL FOX, M.D. 1882 Worcester, Mass. WOODWARD, SAMUEL BAYARD, M.D. 1878. Worcester, Mass.

70 HARVARD MEDICAL SCHOOL ASSOCIATION.

BULLETIN

OF THE

HARVARD MEDICAL SCHOOL ASSOCIATION

NUMBER 3

Report of the Second Annual Meeting held in Boston June 28, 1892



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CONTENTS.

•	PAG
OFFICERS OF THE HARVARD MEDICAL SCHOOL ASSOCIATION	5
Constitution	9
REPORT OF THE SECOND ANNUAL BUSINESS MEETING	1
ACCOUNT OF THE SECOND ANNUAL DINNER	2
Provisional Schedule	7

OFFICERS

OF THE

HARVARD MEDICAL SCHOOL ASSOCIATION.

President.

1871. JAMES READ CHADWICK, . 270 Clarendon St., Boston, Mass.

Dice-Presidents.

1878.	CHARLES PARKER BANCROFT, .	Concord, N.H.
1856.	CHARLES EDWARD BRIGGS,	2747 Olive St., St. Louis, Mo.
1861.	ROBERT THAXTER EDES,	Adams Nervine Asylum, Jam. Plain.
1860.	JAMES MILTON FLINT,	Navy Dep't, Washington, D.C.
1869.	WILLIAM ABRAHAM HASKELL, .	Alton, Ill.
1865.	Amos Howe Johnson,	26 Winter St., Salem, Mass.
1865.	GEORGE HERMAN POWERS,	533 Sutter St., San Francisco, Cal.
1867.	FREDERICK RUSSELL STURGIS, .	16 W. 32d St., New York City.
1868.	VERNON OTIS TAYLOR,	Box 1459, Providence, R.I.
1868.	JOHN ORDWAY WEBSTER,	59 State St., Augusta, Me.

Creasurer.

1875. WALTER ELA, 62 Brattle St., Cambridge, Mass.

Secretary.

1885. ROBERT WILLIAMSON LOVETT, . 379 Boylston St., Boston, Mass.

Councillors.

FOR THE TERM ENDING IN 1896.

1867.	CHARLES GREENLEAF CARLETON,	301 Essex St., Lawrence, Mass.
1861.	FRANCIS HENRY BROWN,	75 Westland Ave, Boston, Mass.
1864.	SAMUEL WOOD LANGMAID,	373 Boylston St., Boston, Mass.

6

HARVARD MEDICAL SCHOOL ASSOCIATION.

FOR THE TERM ENDING IN 1895.

1870.	CHARLES FOLLEN FOLSOM,		15 Marlboro St., Boston, Mass.
1863.	GEORGE EBENEZER FRANCIS,		79 Elm St., Worcester, Mass.

1854. LINCOLN RIPLEY STONE, . . . Newton, Mass.

FOR THE TERM ENDING IN 1894.

1874. WILLIAM STURGIS BIGELOW, 60 Beacon St., Boston, l	1874.	WILLIAM STURGIS	BIGELOW,		60 Beacon St.,	Boston, Mass.
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1865. SILAS DEAN PRESBREY, . . . Taunton, Mass.

1864. FRANCIS MINOT WELD, . . . Storey Pl., Jamaica Plain, Mass.

FOR THE TERM ENDING IN 1893.

1859.	JOHN TAYLOR GILMAN NICHOLS,	63 Brattle St., Cambridge, Mass.
1865.	EDWARD WIGGLESWORTH,	188 Beacon St., Boston, Mass.

1883. ALFRED WORCESTER, 742 Main St., Waltham, Mass.

CONSTITUTION

CONSTITUTION OF THE HARVARD MEDICAL SCHOOL ASSOCIATION.

ARTICLE I.

The name of this Association shall be the "Harvard Medical School Association."

ARTICLE II.

The objects of this Association shall be to advance the cause of medical education, to promote the interests and increase the usefulness of the Harvard Medical School, and to promote acquaintance and good-fellowship among the members of the Association.

ARTICLE III.

SECTION 1. All graduates of the Harvard Medical School are eligible to be and may become members, if approved by the Council.

SECT. 2. By recommendation of the Council and by a two-thirds vote of the Society at any regular meeting, any member may be dropped.

SECT. 3. Every member shall pay an initiation fee of one dollar, and an annual due thereafter of one dollar; but any member may become a life member by the payment of twenty dollars in one payment, after which he shall be relieved from the payment of all dues.

SECT. 4. All physicians who have received any honorary degree from Harvard University shall be *ipso facto* honorary members of the Association. Honorary members may also be elected by this Association on nomination by the Council.

ARTICLE IV.

The officers of the Association shall be a President, ten Vice-Presidents, a Secretary, a Treasurer, and a Council of fifteen members. The President, Secretary, and Treasurer shall be exofficio members of the Council.

ARTICLE V.

SECTION 1. The President, Vice-Presidents, Secretary, and Treasurer shall be elected for the term of three years.

SECT. 2. The members of the Council, not members ex officio, shall be elected in classes as follows: at the first meeting of the Association, three members of the Council shall be elected for the term of four years, three members for the term of three years, three members for the term of one year; and thereafter, at the annual meeting of the Association in each year, three members shall be elected for the full term of four years, to fill the places of those whose term of office shall then have expired.

SECT. 3. Vacancies occurring in any of the offices before the expiration of the respective terms shall be filled at the annual meeting next following the occurrence of such vacancies. The Council shall have the power to fill a vacancy in the offices of Secretary or Treasurer for the remainder of the current year.

SECT. 4. All officers of the Association shall hold their respective offices during the regular term thereof, and until their successors shall be elected and qualified.

ARTICLE VI.

The annual meeting of the Association shall be held at Boston, Massachusetts, on the Tuesday preceding the annual Commencement of Harvard College; provided, however, that the Council shall have the power to appoint in any year a different time and place for the annual meeting, if deemed expedient.

ARTICLE VII.

The President or the Council shall have the power to call a special meeting of the Association at any time, provided that at least two weeks' previous notice be given to all members of the Association.

ARTICLE VIII.

SECTION 1. The executive power of the Association shall be vested in the Council, subject to the control and direction of the Association.

SECT. 2. The Council shall have the power to elect from its own members an Executive Committee of not less than three members, to whom may be delegated such powers as the Council shall deem expedient.

SECT. 3. The Council shall elect every year from its own members a "Committee on the Harvard Medical School," and may elect such other committees from its own members or the Association at large as it shall, from time to time, deem expedient to carry out the objects of the Association.

SECT. 4. The Council shall have the power to appoint, from time to time, one or more Corresponding Secretaries in the different cities or towns of the United States and the British North American provinces. It shall be the duty and office of such Corresponding Secretaries to promote in their respective localities the objects and interests of the Association.

SECT. 5. The Council shall have the power to fix the number of members of the Association necessary to constitute a quorum for the transaction of any and all business save that of amending the Constitution, and to fix also the number of their own members necessary to constitute a quorum of the Council.

ARTICLE IX.

The Secretary, Treasurer, the Council, and the Committee on the Harvard Medical School shall make and submit to the Association, at its annual meeting in each year, reports in writing or print of their respective doings for the preceding year.

ARTICLE X.

This Constitution may be amended by a majority vote of all the members of the Association present at the annual meeting, or at any special meeting called for that purpose, notice of such amendment having been given in the call for the meeting.

ANNUAL MEETING

ANNUAL MEETING.

The annual meeting of the Harvard Medical School Association was held at the Harvard Medical School, Boston, on Tuesday, June 28, 1892, at 12 o'clock, the President in the chair. There were present about 100 members. The Secretary read abstracts of the records, giving an account of the first annual meetings of the Council, and of the Executive Committee, as follows:—

The first annual meeting of the Harvard Medical School Association was held at the Harvard Medical School, Boston, June 23, 1891, with the President in the chair. The report of that meeting has been incorporated in the first Bulletin of the Association.

Several meetings of the Executive Committee and of the Council have been held through the year. The first meeting of the Executive Committee was held on Aug. 14, 1891. It was voted to issue a Bulletin containing an account of the first annual meeting, and that this Bulletin should be sent to every graduate of the School whose address could be obtained. At that time there were present upon the list 1,562 names, and 810 of these graduates had joined. It was voted to complete the list of graduates as soon as possible.

A meeting of the Council was held on Oct. 3, 1891, to consider the advisability of publishing a Catalogue in addition to the Bulletin of the annual meeting. In view of the fact that the list of members was necessarily incomplete, it was voted to postpone the publication of a Catalogue, and to publish simply, for the time, an account of the first annual meeting. It was voted to send a circular with the Bulletin to every graduate who could be reached, asking him to join the Association. Dr. Francis H. Brown and the Secretary were appointed a committee to complete the list of graduates.

A meeting of the Executive Committee was held Jan. 30, 1892, to consider the advisability of printing a Catalogue. The Treasurer and Secretary were appointed a Publication Committee, authorized to publish a Catalogue in an edition of 2,500 copies; and it was voted that one be sent to every graduate of the School, whether or not a member of the Association.

A meeting of the Council was held on May 28, 1892. Dr. Edward Cowles and Dr. W. T. Councilman were nominated for honorary membership. It was moved that the Council elect a Nominating Committee of five, as empowered by Article 8, Section 3 of the Constitution, and, of the five, two of this Committee should be members of the Council, and three members of the Association at large, this Committee to report at the annual meeting two names for each vacancy occurring in the list of officers, and that it should serve for one year. The Council elected as this Committee Dr. Amos H. Johnson, of Salem; Dr. E. H. Bradford, of Boston; Dr. L. F. Woodward, of Worcester; Dr. James R. Chadwick; and the Secretary. The Secretary was instructed to have ballots printed according to the Australian ballot system, which should be used at the annual meeting. It was moved and carried that a Bulletin containing an account of the second annual dinner and proceedings of the present meeting be published as soon after the meeting as practicable by the Publication Committee consisting of the Treasurer and Secretary. It was voted that no further publications or appeal should be sent to graduates who have not already responded to the call for membership.

The membership of the Association to-day is 1,035. Thirteen of these are honorary members. There have been two deaths since the publication of the Catalogue, and eleven other deaths since the formation of the society. Copies of the Catalogue and of the Bulletin have been sent to all graduates in the School whose addresses could be obtained. There were sent out 2,051 copies of Bulletin No. 1 and 2,190 copies of Bulletin No. 2. They have also been sent to the leading medical journals throughout this country and Europe, to the leading libraries, to the Secre-

taries of other Alumni Associations, to members of the Faculty of Harvard College, and to all officers of the Law School Association.

Copies of the Catalogue were also sent to members of the graduating class at the Harvard Medical School.

The report of the Secretary was adopted.

The Treasurer's report was read as follows:—

WALTER ELA, Trasurt, in account with HARVARD MEDICAL SCHOOL ASSOCIATION, June 23, 1891, to June 15, 1892.

To Balance on hand June 21, 1801, in Cambridge Sav-		,
ings Bank,	By annual dinner, June 23, 1891, Vouchers 1, 2, Printing and distributing 2,300 copies of Bulletin	\$426.25
		363.51
٠٠,	<u>บ</u>	10.66
Initiation fees, 376.00	Design and engraving bill of fare and seal for the	
٠	Association, Vouchers 10, 11, 12, 13,	60.25
	P.	80.24
Annual dues for 1893, 2.00		38.00
Contributions, 21.00	_	7.85
Miscellaneous, 4-44	_	•
**		593.65
	Sundry bills, Vouchers 37, 38,	3.79
		\$1,672.55
	On deposit Cambridge Savings Bank, \$977.05	
	On deposit Old Colony Trust Co., 302.89	
	Balance on hand,	-
\$2,952.49		\$2,952.49

The undersigned, a duly appointed auditing committee, report that, having examined the foregoing account and the books of the Treasurer, they find the same correctly cast and properly vouched.

EDWARD J. FORSTER. ALBERT N. BLODGETT.

June 28, 1892.

The Treasurer's report, having been audited, was then adopted.

The society then proceeded to ballot for the election of three councillors for a term of four years.

Dr. Francis H. Brown, Dr. Charles G. Carleton, and Dr. Samuel W. Langmaid were elected.

On behalf of the Council the Secretary nominated for honorary membership Dr. Edward Cowles of the McLean Asylum, Somerville, and Dr. W. T. Councilman, Professor of Pathology in Harvard University. They were unanimously elected.

Dr. Forster moved that the name of the Association be changed to the Harvard Medical Alumni Association. He said:—

My reason for this is that the Law School allows in its membership any member of the Law School, and that name seems right. We do not allow members of the Medical School to be members here, but graduates. I think the President has changed his views from last year. He told me that "alumnus" did not mean graduate. I think he will agree with me that the name Medical Alumni is much better than Medical School Association. I would make that as a motion.

The President.— I should say in explanation that Dr. Forster is perfectly correct about my change of views. In originally adopting this name, when the question was raised, it seemed to me

desirable to have the same name as the other associations of graduates of the Harvard professional schools. I did not appreciate then the distinction which he has now made, that the Law School and the Scientific School admit to membership in the Association those who are in the schools at the time as students and those who subsequently do not take their degrees; that is, any one who has been a year in the Law School, without graduating even, may become a member of their Association. I was also under the impression that the term "alumnus" had retained its original significance, which was simply a student. It has secondarily and lately come to mean a graduate. I think, if the Association favor it, that we had better change; but by the Constitution no amendment to the Constitution can be adopted except "by a majority vote of all the members of the Association present at the annual meeting, or at any special meeting called for that purpose, notice of such amendment having been given in the call for the meeting." It will therefore be necessary to postpone action until our next annual meeting, due notice to be given of that amendment in the notice of the meeting.

At 12.40 P.M. the meeting adjourned.

ANNUAL DINNER

ANNUAL DINNER.

The annual dinner of the Association was held at the Hotel Vendome at one o'clock. There were present one hundred and eighty-five members and as invited guests President Eliot of Harvard University, Dr. William Pepper of Philadelphia, Provost of the University of Pennsylvania, Dr. William H. Welch, Professor of Pathology at Johns Hopkins University, Baltimore, and Dr. James C. White, President of the Massachusetts Medical Society.

At the close of the dinner the President spoke as follows:—

DR. CHADWICK'S REMARKS.

Fellow-Alumni of the Harvard Medical School,—At our second annual reunion I welcome you once again to the banqueting board which has ever proved the most fitting place of reunion for men of our profession, chiefly because the meal-time is habitually the only hour in the twenty-four when physicians have leisure to think of matters higher than the duties of their daily calling. Or is it that we are unconsciously influenced by the fact that the mahogany under which our legs are stretched was first introduced and made popular by Dr. Gibbons, who supplanted the famous Dr. Radcliffe as court physician during Queen Anne's reign? His brother, a West Indian captain

brought over some of the wood as ballast. At first the carpenters refused to utilize the new wood, saying it was too hard for their tools. Dr. Gibbons had made of it a candle-box and then a bureau for Mrs. Gibbons. The latter so pleased the Duchess of Buckingham that she ordered a similar piece of furniture, and thus introduced the wood into high life, where it quickly became the fashion. Whatever the cause may have been, the physicians of that time in England became notorious for their fondness for the table; and many of them waxed wondrous fat, one instance of which we find recorded in the following epitaph of the time:—

"Take heed, O good traveller, and do not tread hard; For here lies Dr. Stafford in all this churchyard."

But your lowering looks remind me that my trivialities are arousing that "cursed New England conscience" to which Dr. Weir Mitchell attributes his failure to cure some of his New England patients.

We are met with a serious aim, and I conceive it to be my first duty to inform you to what extent we are justifying the purposes of our existence. Last year our chief action was to petition that our School should have full recognition as an integral part of the great University with which we are affiliated. As one means to this end, we demanded the right of suffrage in the election of Overseers,—not as an empty honor but as a step essential to the well-being and growth of the University as a whole, and of our special branch

of it in particular. This concession has not, as yet, been accorded us; but our claim has made an impression upon the Overseers, as is shown by the following report submitted to the Board by their special committee:—

REPORT ON VOTING FOR OVERSEERS BY GRADU-ATES OF THE PROFESSIONAL SCHOOLS.

To the Board of Overseers of Harvard College:

The Committee, to which were referred the "Petitions concerning the right of suffrage for Overseers, received from members of the Medical Faculty, from graduates of the Medical School who are not Harvard Bachelors of Arts, and from the Harvard Law School Association," respectfully reports:—

That it gave a hearing on the subject, at which were heard representatives from the Faculties of the Medical and the Law Schools and from the Alumni Association of the Law School, also persons who were graduates of schools, but not Bachelors of Arts. No person spoke in opposition to the prayer of the petitions.

Your Committee is of the opinion that it seems right and expedient to extend the right of suffrage for Overseers to graduates (past and future) of those schools connected with Harvard University which have established a graded course of not less than three years, with an examination for admission, annual written examinations, and examination for degrees, provided that said right shall only enure to such past graduates as have been graduated from the several schools since the adoption by them respectively of the afore-described regulations; also, provided that no person thus enfranchised shall be permitted to vote until the fifth annual election after the receipt by him of the degree entitling him to vote.

This scheme would confer the right of suffrage upon the graduates of the Medical School, beginning at the year 1880; upon graduates of the Divinity School, beginning at the year 1875; upon graduates of the Law School, beginning at the year 1880; and upon graduates of the Lawrence Scientific School, beginning at the year 1875.

The propriety of this measure has been already so often reported

upon and debated in this Board that your Committee deems it unnecessary now to do more than to indicate in a broad and general way the motives which have induced the foregoing expression of opinion.

The mental capacity of graduates from schools having the regulations above insisted upon for voting intelligently for Overseers cannot be doubted. Neither is it to be supposed that they have less knowledge than is enjoyed by the Harvard Bachelor of Arts as to the condition and interests of the University as a whole. They have graduated from one of its departments as he has graduated from another, and it is necessary that all the parts should be represented in order to have the whole represented. It is along this line of reasoning that the Committee has come to its conclusion. The process and the reason for it are as in the case of the admission of States to the Union. The schools which have certain qualifications of growth and development are entitled to have a share in the universal government. Harvard College, that was, is now ambitious to be known as Harvard University. If there really is a University, there is no reason why the supreme control of the whole should be vested in one department only, especially in that department whose graduates have gained their ideas concerning the institution generally at a less mature age than the graduates of the other departments. If schools as advanced in their intellectual requirements as those which have been named are integral parts of the University, why should not their graduates be voters of the University? It seems just that they should be so.

Besides being just, this measure seems fortunately to be also desirable in the mere point of view of expediency. It is for the welfare of the College, or of the University if we are to have one, to have interest in its affairs disseminated as widely as possible, to have as many well-wishers, advocates, supporters, as may be to befriend it in every way in all the walks of life and in all parts of the country. By conferring the franchise on graduates of the schools, we foster this interest, this loyalty and kindly feeling, and cause these sentiments to be kept alive among a considerable number of persons who now feel no such encouragement. We make sons of those who are now step-sons. The graduate of a school who, having taken his degree, indeed by the very act of taking his degree, finds his connection with Harvard absolutely and forever severed, has thereafter little nourishment for his inter-

est and affection for her; but, if every year he finds himself invited to exert some influence in her government by nominating candidates for the Governing Board, and if he can cast a vote for these candidates, provided he is within reach of the polls, then he has an annual refreshment of his interest and his sympathy. He enjoys the "freedom of the University." He will be more fond of it, more ready to defend it in controversy, more ready to aid it in many indirect ways in which men in active life can aid such an institution.

The chief objection to this enfranchisement of school graduates seems to be a sentimental one. It is akin to that which led so many excellent gentlemen in 1861 to stand by their respective States rather than by their whole country. But, in the first place, the government of the University, if such it is to be, is a matter of business; and what is sentimental must yield to what is right and expedient. In the second place, sentiment itself should recognize the pleasure of expanding the brotherhood, so as to promote good will, good fellowship, and a common interest in an increased circle of persons naturally homogeneous, rather than the somewhat questionable and illiberal pleasure of protecting a coterie from amalgamating with its neighbors who are its natural fellows.

Another objection, on the ground of too great influence and power to be acquired and exercised by the newly enfranchised voters, seems entitled to little weight. Either one of the Schools would gain only a trifling number of voters in addition to those of its graduates who now have the right to vote; and the number of the newly enfranchised who would be present at Cambridge actually to cast a ballot at any election would be so insignificant that it is impossible seriously to concern one's self about it. The effect upon the composition of this Board would probably never be great enough to be clearly traceable.

In pursuance of the foregoing, your Committee recommends a vote as follows:—

That a committee be appointed to draw up such amendments to the present statutes establishing the right of suffrage for Overseers as shall extend that right in accordance with the recommendations of this Report; and that the same committee take the proper steps to procure the passage of such amendments by the legislature.

JOHN T. MORSE, JR. GEORGE B. SHATTUCK. FRANCIS RAWLE.

June 10, 1891.

IN BOARD OF OVERSEERS, June 10, 1891.

Voted, To accept, and to print for the use of the Overseers, when supplemental matter has been presented by the Committee.

Attest:

ALEXANDER MCKENZIE,

Secretary.

SUPPLEMENT.

The total constituency under the existing act of 1865 is in round numbers in 1891 five thousand.

If the act were amended in accordance with the recommendations of the foregoing report, the following limited additions would be made to the constituency up to July, 1891:—

Bachelors of Divinity,		3 8
Bachelors of Science, Civil and Mining Engineers,		
Bachelors of Laws,		58
Doctors of Medicine,		325
Total addition,	 	462
Total present constituency,		5,000
Total proposed constituency in 1891,		5,462

The immediate addition would be less than ten per cent. of the total present constituency.

Of those thus added to the constituency, one hundred and forty-seven, or about thirty-three per cent., have degrees of other institutions than Harvard College.

Attention is called to the fact that thirty-one of the present Senior Class of the Academic Department of Harvard College have degrees from other colleges, and of these all but two have spent but one year in residence at Cambridge. This is about ten per cent. of the class.

When put to vote, this recommendation of the Committee was rejected by an adverse majority of fifteen to nine votes. Those in the negative were the Treasurer, and Messrs. Codman, Coolidge, Green, Hoar, Lee, Lowell, A. P. Peabody, Russell, Salton-

stall, G. O. Shattuck, Sprague, Torrey, Weld, and Williams. Those in the affirmative were the President, and Messrs. Adams, Bonaparte, Folsom, Hemenway, R. S. Peabody, Putnam, G. B. Shattuck, and Wolcott. While we are thus unsuccessful for the time being in obtaining our rights, we can take some satisfaction in noting a considerable change of sentiment in our favor since the Board last passed upon the question. If this matter is made a prominent factor in determining the qualification of candidates for the Board of Overseers, it will not be long before the adverse majority may be converted into a favorable one.

Since last we met, a list has been made of all living graduates, with their addresses so far as known. A catalogue of such as have joined our Association has been compiled, printed, and distributed at a total cost of \$593.65. I ask you to render thanks for this really great task to your Treasurer, Dr. Walter Ela, to Dr. Francis H. Brown of the Council, and to your Secretary, Dr. Lovett. The Treasurer informs me that there was a balance on hand on June 15 of \$1,275.94, although many members were delinquent in the payment of their annual dues and even of their entrance fees.

The Medical School has been exceptionally prosperous. The first class entered last autumn with 171 members. The total number of students in the School was 399.

The Medical Faculty has throughout the past year

been expending all its energies in preparation for the establishment of the graded four years' course of instruction which was last year announced to go into effect in September, 1892. A provisional schedule of the studies distributed over the four years has been printed and distributed by the Faculty, which will be printed in the report of this meeting. Our School will by this act have the credit of inaugurating in this country this great step in the advancement of medical education, and must be supported by the influence of this Association as a body and of every member in his individual capacity.

As is known to you, the Medical Department of the University of Pennsylvania has likewise voted to establish a four years' course in 1893; and the infinite resources of its Provost, who is our honored guest to-day, is a guarantee that the pecuniary conditions, preliminary to the step, will be fully met within the twelve months. That the times are ripe for this extended course of medical instruction is evinced by the following response to my invitation from the Hon. Seth Low, the recently installed President of Columbia College in New York, with which the institution hitherto known as the College of Physicians and Surgeons has been affiliated as its Medical Department.

COLUMBIA COLLEGE, NEW YORK, June 8, 1892.

Dear Dr. Chadwick,—I am sorry that I shall not be able to attend the dinner of which you speak, as Mrs. Low and I hope to sail for Europe on the 14th inst.

I confidently anticipate that the curriculum in the College of Physicians and Surgeons will be made to cover four years at an early day. Our Trustees have desired to complete one year's experience with the Medical School before entering upon a new basis. The opinion, however, I know to be favorable to such a policy both in the Faculty and among the Trustees.

Yours sincerely,

SETH LOW.

It is worthy of note that the three medical schools which are thus taking the initiative in improving medical education are all connected with universities. whence we may infer that they derive, if not direct pecuniary benefit, at least inspiration to higher ideals, a clearer perception of educational needs, and a more assured status from this connection. What is a University? The term universitas in its original significance never had any connection with universale as carrying with it any reference to the universality of the curriculum of study. In the Middle Ages the term universitas was applied to towns or communities as organized bodies: a universitas literaria was a learned community. When the popes issued letters of privilege to a university, they addressed it as universitas doctorum et scholarium. In modern times the term "university" has come to indicate an incorporated body of teachers and students divided into more or less distinct schools or colleges. the continent of Europe a University has been generally considered incomplete unless it embraced the four faculties of Arts, Law, Medicine, and Theology.

In England these distinctions have not been followed. In America the name "University" is often adopted for the absurd reason that it is supposed to be more dignified and to imply a broader scope of instruction.

In the *Cosmopolitan* of August, 1891, President Gilman of Johns Hopkins University seeks to make distinctions between collegiate and university methods of instruction as follows:—

In the educational systems of enlightened countries the period between boyhood and manhood, adolescence, is recognized as requiring special care. Lasting habits of intellectual life are usually formed between the limits of fifteen or sixteen years of age and the attainment of a majority. This is the time when thorough training by trained teachers is essential. Consequently, in the public schools of England, in the lycées of France, in the gymnasia of Germany, in the American colleges, strict disciplinary methods have wisely been maintained. Frequent tasks have been appointed; lessons have been contrived to exercise the various mental powers,—judgment, observation, memory, imagination; modes of testing individual progress have been elaborated, - prizes, honors, admonitions, and reports; schemes of study, designed partly to store the mind with useful knowledge, partly to develop the love of letters, partly to illustrate the methods of scientific inquiry, and partly to reveal to the student his own strength and weakness, have been carefully arranged. . . . It is the function of a college to give this discipline. From this brief sketch of the distinctive features of collegiate discipline we shall now turn to those of the university.

After the mind has been trained to the habits of accuracy, method, remembrance, discrimination, after it has been made acquainted with just standards of measurement, after it has been introduced to several branches of knowledge, a different kind of cultivation is called for. Perhaps the greater number of young men then look forward to those pursuits which will yield an income. Those who wish to study longer were expected in old times to follow one of the three so-called learned professions. Now there are

hosts of modern callings which require prolonged preparation. Much greater freedom may be allowed the student at this period of his education. The university methods recognize more posi-Independent investigation in limited tively individual needs. fields and under proper guidance may be encouraged. Co-operative study to some extent takes the place of formal lectures. The approaching responsibilities of life are felt so strongly that there is less occasion for the artificial stimulants to exertion which were found important at an earlier age. In short, the university methods, especially those of the philosophical department, deal with individuals rather than with classes. Under their influence students learn less from one another, more from their own exertions. They recognize in their teachers men who are themselves learners, probably also producers; and they draw inspiration from such examples and strength from such helpers. There should be nothing provincial, nothing sectarian, in university methods. They should elicit, by the processes of educational assaying, the golden ingots of truth. ...

While all this may be good and true, it seems to me that the ordinary mind will adhere to its possibly misconceived ideas, and will continue to regard a university as an aggregate of colleges covering as many departments of knowledge as are called for in the community in which they exist. The one thing to be remembered is that the system of government and, perhaps to some extent, the curriculum of studies adapted to a college is not such as will yield the greatest good when applied to a university. For, to paraphrase a metaphor of Dr. John Brown, of Edinburgh, "a system is to a college what an external skeleton is to a crab,—something it, as well as the crab, must escape from if it means to grow bigger. Our skeletons are inside our minds; and so, generally,

ought our systems to be inside, not outside, our colleges."

While co-operation with the Medical Faculty in insuring success in the establishment of the four years' course must enlist our chief efforts during the coming year, two other projects are on foot which merit our support. One is the establishment of a Harvard magazine by the alumni of all the departments of the University, which shall keep the alumni informed of every change in the University, shall publish reports of all the meetings of the alumni associations, and promote the interests of the University in every way. The other is the raising of a fund by the Boston Medical Library Association to erect a fire-proof building upon the lot of land which it bought several years ago. The alumni of the Harvard Medical School are all interested for their own sakes in having that large library of twenty-three thousand volumes and an equal number of pamphlets secured against the possibility of destruction by fire, and in erecting a building commensurate with the dignity and importance of the medical profession in Massachusetts. But they cannot forget that the Library Association is according the free use of its collections to the medical students in the School. Evidently, during the coming year the medical alumni of this University must justify the interpretation put upon the degree of M.D., when the first one conferred in this country was given by Yale College to Daniel Turner in 1720. He had been a liberal benefactor of the college, so his new title of M.D. was interpreted to signify multum donavit.

Our first toast is to the Committee whom you appointed last year to report upon the condition of the Medical School. I call upon Dr. Nichols, its Chairman.

REPORT OF THE COMMITTEE ON THE HARVARD MEDICAL SCHOOL.

Twenty-one years ago the Harvard Medical School, by its adoption of a three years' graded course of instruction, made a new era in medical education.

This was a bold step for teachers to take whose salaries were derived mainly from tuition fees. They deserve, and history will give them, high praise for their unselfish devotion to the cause of education. The success of this enterprise is known to all. Even from a money standpoint the reward has been substantial. From a higher point of view, the results of this movement can hardly be overestimated. Many of the leading schools of the country have adopted this system, and the impulse thus given to the better study of medicine has been felt by every school in the land.

We celebrate to-day a new step in advance. From this time a four-year graded course is the condition of a degree in medicine from Harvard University. There can be no doubt of the success of this movement. Harvard has never yet had reason to regret the raising of its standard of education.

While this Association gladly recognizes and bears witness to the high character of the instruction given in our School, its best work will be done in pointing out its weak spots, if any there are, and in stimulating and aiding its teachers to make it strong at every point. Your Committee have not had the time nor the ability to make a thorough investigation of all its departments. In considering what it has to say in the way of suggestion or criticism, it desires you to remember that its members have had no experience in teaching. They are only privates in the medical

army, with some practice in its campaigns, and with, perhaps, the common failing of the rank and file, to think they know more than their leaders. They offer this report with modesty and with loyalty to those whose good work has made the School what it now is.

The importance of the preliminary education of medical students is made more evident as the standard of medical study is raised. In those schools in this country in which any test of preliminary training is made, a common school education is practically all that is demanded. Harvard alone requires some knowledge of Latin. A knowledge of general chemistry will be a condition of admission after 1893. Our preliminary examination is about equal to the minimum requirement for registration as a medical student of the General Medical Council of Great Britain and is far below the standard of the countries of Europe.

Harvard has it in its power to render the cause of medical education a service hardly less important than its higher standard for a degree has done, by increasing its requirements for admission to the School. The examination should be at least the equivalent, as evidence of mental training, of the examination for admission to Harvard College. Harvard wants only good men. The experience of the Medical School, as well as of the College, shows that such men are not few in number and that they will go where they can get the best return for their time and money.

The prominence given to clinical and practical teaching is the most valuable advance in modern medical study. It must not be forgotten, however, that there is a science as well as an art of medicine and that didactic lectures and text-books are essential parts of the system of instruction. The recitation, which has gone somewhat out of fashion of late, may still be made useful. It is an oral examination, and, given at short intervals, tests the daily progress of the student as no other method can. It is recognized in our School, though it has a limited use. Cannot much more be made of it? At present recitations are voluntary and but few take part in them. The teachers with whom your Committee have consulted say that the best students are the ones who attend and answer when they are called up.

The student who is working only to pass his examinations may see no value in work that does not tell directly to that end. If these oral examinations were held frequently, in certain departments, with the understanding that they would be considered at the final examinations of the year, attendance upon them would become general, with, we believe, good results to both students and teachers. The student who can put his knowledge into words shows his understanding of the subject. If an intelligent student cannot do this, the teacher may be led to review his method of imparting knowledge.

In the four-year course the department of clinical medicine will be perfected and extended, so that every student, we are told, will be a hospital pupil. This will be a great improvement; for, even of late years, the old scene of many students crowding around the bed of a hospital patient has been repeated.

The clinical teaching of Obstetrics is excellent. Each student must have attended, in their homes, six women in labor before his graduation and must report each case in full. If he meets with complications, he can have the aid of an instructor. Why should not students attend medical cases under like conditions? There can be no want of material; for, if women in labor can be found who are grateful for the services of students, surely consumptives and fever patients and sick children can be found who will willingly accept the care of an advanced student. Diseases can be well studied in the hospital wards. Patients can be studied to much better advantage in their homes. The theory of medicine can be taught in the lecture room, the practice of medicine can be better learned by the devotion of the student's head and heart where he is alone and responsible.

There were advantages on both sides in the old method of studying medicine with a physician. Is it not possible, in some such way as we have outlined, to secure what was valuable in that method? The time devoted to this work would be well spent, for the student would have the great advantage of the opportunity to use his knowledge while acquiring it. His knowledge of the diagnosis and treatment of disease would be much better determined by reports of cases he has himself observed than by his answers to the questions usually put in the examination papers in Clinical Medicine

The finished product of a medical school is a man well fitted to cure the sick (using the word in its broad and only true meaning of care) and to prevent disease.

Materia Medica includes much more than drugs: Therapeutics

means much more than the knowledge how to prescribe them. The department of Materia Medica and Therapeutics should be made one of the most important in the School. It should include hygiene, both private and public, the care of the sick both in body and in mind, as well as the properties and uses of such drugs as are approved by experience. Its teacher should be a man of broad culture, of sound judgment, of large experience in caring for the sick. What position does this department hold in the new order of studies, and how nearly does it approach the standard we have indicated?

Materia Medica and Therapeutics are to be taught in the second year by two lectures each week of one hour each. An examination of two hours at the end of the year determines the standing of the student in these branches. The examination papers in Materia Medica for the last two years do not offer even a suggestion that we have any other agents than drugs with which to treat disease. The papers in Therapeutics for the same period are of like character. With the exception of one question, "The use of cold in fever, and precautions," they relate solely to the uses of drugs. The subject of special Therapeutics is well taught in various departments in the School. Taught in this way, however, it stands only as a part of the subject, and reflects the opinions and practice of men who may not always be in accord.

The duty of fitting the student for the practice of medicine is very distinct from that of determining his fitness therefor. Unfortunately, both these duties devolve upon the Faculty of the Medical School. The graduate of the Law School or of the Divinity School is not commissioned to practise or to preach by his Harvard degree. His fitness to enter the ranks of his chosen profession must be determined by an examination held, as the case may be, by the members of the bar or by the ecclesiastical body of his choice.

It is to be hoped that the day is not distant when the medical profession in this State shall have some power to decide who are fitted to practise medicine. So long as the Harvard degree of M.D. virtually admits its possessor to the practice of his profession, some means should be devised to relieve the Medical Faculty of this double duty. Not until this is done can the relation which should exist between them and the students be established.

As it is now, students will study their instructors' "hobbies," will hide from them their ignorance, and will regard them not alone as teachers striving to lead them in the paths of knowledge, but as in some sense their natural enemies. And why not? They decide whether the student this year or next shall be allowed to begin to earn his living. They occupy two antagonistic offices,—they guard the gate which they urge their students to try to pass.

In the opinion of your Committee this disadvantage could be removed by the appointment of an examining board outside the Faculty. Men eminent in the profession could doubtless be secured for service on this board in return for the honor such an appointment would confer. Examinations would then test not merely the student's memory of what his instructors have said, but his real grasp of the subject. The great gain, however, would come from the better relation between the students and their teachers.

The Harvard Medical School must take the first rank. It must not long be second to any school on either side the ocean. To secure this position, it must be able to enlist in its work the best teachers the world affords. Up to this time its limited resources have narrowed its choice of teachers to men living in or near Boston. This is a disadvantage; for, eminent as its teachers may be, they cannot represent the breadth of our country. This has long been recognized by the friends of the School, and especially by its Faculty. The recent appointments of Professor Councilman to the Chair of Pathology (so ably filled by its former incumbent) and of Professor Howell as Associate Professor of Physiology are steps in the right direction. May an endowment fund soon be obtained, which will allow the Faculty the widest choice of teaching ability! Meanwhile, in order to secure some part of the advantage of having the best instruction the world affords, it might be feasible to arrange for at least a few short courses on special subjects by men foremost in their departments. If these courses were open to graduates upon payment of a fee, the expense might be met in part.

Would it not be a fitting thing for this Association to give to the School annually the means wherewith one such lectureship might be provided?

The School needs now, as always, money. The Faculty has

met this want by the simple but rather hard expedient of serving for small compensation.

The most urgent need of the School is a permanent fund, large enough to place it on a sound financial basis, to enable it to pay its teachers adequately, and to avail itself of everything which can add to its efficiency. The public should not fail to recognize the fact that no department of education is of greater importance to the community than that which deals with health and life. We are glad to learn that a movement to this end is under consideration, and we pledge the aid of this Association in making it a successful one.

In common with the other professional schools of the University, the Medical School has no voice in the choice of its governing body. The injustice of this is evident at least to its graduates. The Board of Overseers is gradually coming to the same opinion, and we may confidently look for the right to vote for our rulers at no distant day.

J. T. G. NICHOLS, L. R. STONE, A. WORCESTER, Committee on the Medical School.

The President.— I learned the futility of suggesting to President Eliot the topic upon which we desired enlightenment three years ago, when introducing him to an audience of medical men in this city. He attains more fully than any man I know to the requirements made of the physician in former times, that he should be learned in omnibus rebus et quibusdem aliis. I will consequently let him loose upon you without more ado.

RESPONSE OF PRESIDENT ELIOT OF HARVARD.

Mr. President and Gentlemen,— I want first to congratulate you on the establishment of this Association. I didn't have a chance to do it last year, being engaged, at the hour of your dinner, at the corresponding Association belonging to the Law School. It was therefore with singular pleasure that I found

myself able to come here this afternoon. I most heartily believe in the value, to the University and to all its departments, of these permanent Associations of the graduates of its different departments. I know from personal observation that the Association of the Alumni of Harvard College, the department of Arts, has been of infinite service to Harvard College; and we have learned within the last five years that the Association of the Law School graduates can be and has been of great service to the Law School. I confidently anticipate the same sort of service to the Medical School from this Association, and what I have heard here this afternoon strengthens me in that expectation.

You have already had placed before you two perfectly distinct objects to struggle for. One is the suffrage for the Board of Overseers. I have for many years been of the opinion that the suffrage should include all graduates of the University; and I have been very glad to see how that opinion gathers weight in the Board of Overseers, though we still command in that Board only about one-third of the votes. I agree with your President that with perseverance the proportion of the Board of Overseers will constantly increase till a majority is obtained. Justice seems to me to require the extension of the suffrage; and I should add to that my conviction that the interests of the University require it, and will all be promoted by this extension of the suf-

frage. The excellent report to which we have just listened illustrates to my mind a characteristic of the University, which was brought home to me the other day by one of our youngest professors. The report to which we have just listened gives praise, but also makes suggestions of new things which ought to be done. It is critical as well as laudatory.

We have had some interesting experiences at Cambridge during the past three months with regard to keeping teachers and getting them from other insti-We have got for the University five new professors within two months from other universities. We have retained at Cambridge eight teachers, three of them professors, five of them only instructors, when invited to other universities at much larger salaries and with higher titles. I need not say that these are peculiarly satisfactory experiences to the government of the University, and I have been trying to find out some of the reasons for this condition of things. One of them was given me in very few words, I think, by one of our younger teachers, who had come himself from the service of another university to our university. I asked him why he found service here more agreeable than it had been in the other institution with which he was connected. reflected for some time, and finally said: "Well, I think one of the principal reasons is this. vard University a man may criticise the existing condition of things, and he may oppose the projects of

the majority or of the administration, and yet he will not be held in the slightest degree to be disloyal. I have seen in other institutions," he added, "that that is not the case." In my now somewhat long connection with Harvard University I have found that to be one of its most valuable characteristics. We can criticise each other. By "we" I mean the members of the instructing boards, the members of the government, the alumni in all departments. We can criticise each other with reference to university plans and projects. We can oppose each other most heartily sometimes, and yet there is never any sensation of disloyalty towards the government or towards the institution itself.

I hope you will be careful to keep up this custom of an annual report on the condition of the School, and that we may get from it in successive years suggestions as valuable as those to which we have just listened. I find them to cover the most important points which have been in my own mind in regard to the future of the Medical School. More particularly I should like to instance the recommendation of the report about an outside board for admission to the profession of medicine. Why is it that admission to the profession of medicine in Massachusetts is at this disadvantage compared with admission to the profession of law? The very last thing the Law School or the Law Faculty would desire would be that their degree should admit to the bar. Other

institutions have worked that out most thoroughly. Take, for instance, the School of Law which is connected with Columbia College. It was demonstrated beyond a doubt that the fact that the law degree of Columbia admitted to the bar was a clear disadvantage to the School and to the profession. We have had a public demonstration upon this subject. It is just so in medicine, gentlemen. It is a clear disadvantage in medical education that the degree given by a Faculty, a teaching Faculty, should admit to the profession. The standard should always be outside, determined by another power. I leave it to you to say what that power should be.

Let me dwell for a moment on another point of the report, which I believe to be a point towards which your own labors might from time to time be directed in your individual capacity and also as an Association. Why is it that a full professor's salary in the Medical School of Harvard University,— I mean for gentlemen who give all their time to the School, not the gentlemen who are in clinical or surgical chairs,—why is it that the salary of a full professor, giving his whole time in the Medical School, is lower than in any other department of the University? Is this as it should be? That is the simple fact, it is lower, it is a good deal lower, than it is in the other departments of the University. I submit to you that here is a point on which change should be promptly effected, that it is not fitting that the services of medical teachers should be so much lower than the services of other professional teachers in the same University. At best, the scale of salaries for full professors in Harvard University is lower than in many other institutions; but in our Medical School we have the lowest full professor's salary. The gentlemen who serve in those chairs are not of less ability than those that serve us in law or in divinity or in the arts and sciences. They are not of less devotion.

I believe that this all hangs to our English inheritances on this subject. I need not tell you, gentlemen, that in England the profession of medicine, the profession of surgery, does not now to-day stand on a level with the other learned professions. This is not the case on the continent: it is conspicuously the case in England at this moment. They have the inheritance of the barber and the barber surgeon still in their minds in England; and we have inherited two things from England,—a lower standard of general education in the medical profession, the lower standard of requirement for admission to that profession or admission to the studies of the profession,—and we have inherited this lower rate of compensation. I wish we could attach ourselves to the continental schools of medicine rather than to the English in these regards. We have already far surpassed our English brethren in procuring for the medical and surgical practitioner the right standing in the community, in procuring for the medical and surgical practitioner the same standing which the lawyer or the preacher or the teacher holds. But we have something still to do with regard to the scale of instruction and previous training required for admission to medical schools; and we have something still to do in the medical schools themselves in putting them on the right and equal basis of endowment which other professional schools, the schools of other professions, have already established for themselves.

I must not longer delay you, gentlemen. only say that the progress in medical education in our own university and in the other universities of the land made during the last twenty years seems to me to be the most considerable progress that has been effected in any department of professional education within the same period. It is simply marvel-When I look back on what was required of the Medical School before the year 1870, not only in our own school, but in many other schools, and compare it with what is required to-day, I see a progress which cannot be met in any other department of education; and I know that for that progress we are indebted largely to the prevailing sentiment in the medical The Harvard Medical School would never have been able to carry out its changes of 1870-71,—changes which reduced by nearly 40 per cent. the number of students in the School,—if it had not been for the support received through the express public opinion of medical men; and I believe that the change which is now before us, the change to the four-year course, will require the same kind of steady and enthusiastic support. I desire to thank you, gentlemen, for the support which in the last twenty years you have given to our School, to all schools that were endeavoring to advance the standard of medical education. Go on with this excellent work in the years to come.

The President.— The Medical College of Philadelphia, the first institution established in this country to give medical instruction. was organized in May, 1765, by Doctors Shippen and Morgan. From this humble beginning was developed the medical department of the University of Pennsylvania, which to-day ranks among the greatest schools in the land. A certain French surgeon was taken prisoner in Georgia by some Indians, who, having acquired the art of larding their provisions, determined to lard this particular Frenchman, and then roast him alive. During the culinary process they were surprised by their enemies; and their victim, making his escape, is said to have lived many days in the woods on the bacon he had in his skin. If even half that we hear from Philadelphia is true, I think that the University of Pennsylvania will be able to subsist for many years on the "fat" which is being injected into it by its all-subduing Provost, whom we are gratified to have with us to-day as our guest. I call upon Dr. William Pepper, Provost of the University of Pennsylvania.

RESPONSE OF DR. PEPPER.

Mr. President and Members of the Alumni Association of the Medical School of Harvard University,— I am very glad to be with you. I am never so happy as when I am among medical men. I take a great interest in some other branches of education, but I take more interest in medical education than in any other; and I am right glad to hear President Eliot bear tribute, I think a fairly deserved tribute, to the progress that this branch of education has made during the past two decades, and I should be very glad, if time permitted, to extend very much his tribute to what the graduates of the Harvard Medical School have done and are doing. But I must resist this temptation, for I want to speak in the moment that is given to me briefly of the practical points that it seems to me there are before us to-day.

I do not think that the country is nearly so ready to-day for the change to a four-year course as it was twenty years ago to a three-year course. Personally, I regard the change to a four-year course, an honest, obligatory four-year course, with much more apprehension than I regarded the change to a three-year I believe that it is going to test the resources of the medical schools more severely. I believe that it is going to endanger our classes more severely. believe that it is going to call for more sacrifices on the part of the faculties and the graduates who support those higher standard schools than did the change to a three-year course; and a study of the proportion of students who in that former period were taking three years when they might have had their diploma in two years, as contrasted with the proportion who are now honestly taking four years as contrasted with three years, where they are only required to take the

latter term, would confirm what I say. Particularly would I dwell upon this, because, as I understand the necessity for this change, it is to give more time for thorough clinical work. It is not to give more time to chemistry or to physiology, but it is to give more time to clinical work; and any one of you who knows what the equipment of the clinical department of a medical school should be, who knows the tremendous expense connected with the maintenance of a great hospital, who knows how absolutely dependent a medical school that undertakes to do this kind of clinical work is upon a hospital service, will realize somewhat the risk that our medical schools are taking when they propose to demand four years obligatory study, and to promise that at least one year of that shall be practically a hospital year.

I remember very well John Cheyne, the great surgeon of Edinburgh, the professor of surgery in that school, which I think has in its medical school to-day twenty-five hundred students, certainly between twenty-two hundred and twenty-five hundred students, telling me that there had been spent upon the Royal Infirmary of Edinburgh between 1869 and the year he told me, 1886, over half a million sterling, chiefly coming from the citizens of Edinburgh; that every time, said he, that Edinburgh has needed help, it has appealed to Scotchmen the world over, and has heard from a good many of them. And at that time Cheyne was formulating appeals with his colleagues of the

faculty for one hundred and fifty thousand sterling more for the Royal Infirmary of Edinburgh; and it was the Royal Infirmary, and the Royal Infirmary alone, which, in the judgment of that shrewd man and great surgeon, had made the school of Edinburgh the brilliant success that it is, the most conspicuous success, practically, in the world to-day among medical Now, we have, at the University of Pennsylvania, sunk in a hospital plant in the last twenty years a million and a half of money, land and buildings and endowment,—a terrible drain upon the University, solely to have under our hands control of clinical teaching for the advanced students; and you must have. You have a committee. That committee is asking for appropriation for the establishment of a clinical department. That committee must be supported. Harvard Medical School must have absolute control of her clinical facilities. Predecessors of your Faculty wisely foresaw this, and took steps to establish the Massachusetts General Hospital. I have nothing to say. I doubt not that the trustees of that great institution are absolutely wise and absolutely singleminded in the interpretation they put upon their duty; but I do know that one of the terrible strains that is coming upon our medical schools to establish this four-year course is to be the furnishing of a kind, a quality, and an amount of clinical instruction that is going to justify the student in giving one year more of his life and paying one year more fees, instead of getting his diploma at a college granting it in three years, still more in one, and there will always be with us many such granting them in two years. Here, then, is a point to which I would beg your most earnest consideration and your most cordial co-operation with the faculty,—the colleges that can do this work. And we must stand or fall together. No one college will succeed in this; and, if this effort to establish a four-year course meets with discouraging results, it will be the most serious set-back to scientific training that can be imagined. The colleges that succeed in this will be those that are supported by their graduates and by their constituencies in providing the suitable clinical instruction. Again I would beg. know Mr. Eliot has thought of this, perhaps earlier, certainly as seriously, as any man in America. I only wish that he had in fact what some assign to him here, autocratic power, and that his will might at once be law in this matter; for I would trust most willingly to his wise judgment, and I have, when I have so trusted, never found myself in error.

But, if we are to have at the same time a continuous advance in the standard for admission to our colleges, and then to exact a prolonged course of medical study, it will break the backs of the best schools. We cannot alter the social habits of a nation to make them conform to our notions of what the standard of teaching in this or that department shall be, we cannot reconcile any large proportion of our fellow-citizens to seeing their sons or their wards delay, until the age of twenty-five, twenty-six, and twenty-seven years, entrance upon practical life, in order that they may win a B.A. or a B.S., and then get their M.D. in a four-year medical school. I am as convinced as of anything that it is absolutely necessary for the medical schools that are going to exact a four years' course to make provision for obtaining the double degree in less than eight years. That this must be accomplished in some way I feel absolutely certain. Mr. Eliot has made a suggestion. It has not been supported. It probably was the very wisest. man knows the educational organization and system of Harvard as he does. I have no doubt that it was the wisest that meets the case. You have heard Mr. Low quoted. At Columbia they have practically abolished the Senior year of their college department, as I understand it. They permit a Junior, studying for his B.A. degree, to go at once into the Medical School and to take his Senior year in the Medical School, getting his B.A. and his M.D. thus in seven years. At the University of Pennsylvania we have established a graded five years' course of mixed biology and medicine, which the student may enter at the close of his Sophomore year, and get the degree of B.S. and the degree of M.D. thus in seven years. Do not let us handicap medical education too heavily. Do not let us ask our faculties to turn out thoroughly trained men, trained

at the bedside, giving that clinical instruction which alone renders a man fit to take charge of suffering humanity, and deny them the laboratory facilities which are necessary. Do not ask them to set a high standard of admission, a higher standard of entrance examinations, to pass a second examination before a State Board of Examiners, and put the whole of this on at the same time that we appeal to them to take a college course for four full years. If you provide your Medical School with endowment, you will accomplish this for a limited number of the highest grade of students; but you will shut out from your doors those whom I would gladly see here, not to swell your ranks, but because I hold that no matter where the doctor goes to practise his calling,—and the more remote the point, the further from the centres of education, the further from the chances of professional assistance,—the more essential does his thorough practical equipment become. You will shut out from your doors hundreds of those who are the very men we should be glad to see here. You need more fellowships, more scholarships in your medical department to-day upon its advanced scale of medical instruction, than you need in any other department of the University. You must have endowment for your hospital. You must have endowment for your professors' chairs. Do not, gentlemen, leave this pleasant banqueting hall with the notion that the Faculty of Harvard Medical School are entering with any gayety

of heart upon this change they have resolved upon with the sanction of your Corporation. Do not imagine that these men are going to have a holiday task in carrying this through to success. You will be willing enough to criticise them if the prestige of Harvard Medical School suffers. Be equally willing to see to it that their hands are strengthened here and strengthened all over the country where you go. There is not a man in this room who has not it in his power to make this task easier for your Faculty.

All I wanted to say when I rose was to express my great pleasure at being here. I wish I could tell you how glad I am. I know the history of your Medical School by heart. I know its heroes, the great men of the past, and no less great men in your Faculty to-day. But I wanted to express, with all the earnestness I could put into a few words, my prayer to you for co-operation with your Faculty, wise, cordial, not too critical, during what I think is to be the great crisis of medical education in this country.

The President.—Most of our universities have, like Harvard, been founded upon the basis of one famous school by the addition of the other faculties. The University of Prague was, however, founded by Charles IV. of Bohemia in 1348, as a complete University from the outset, after Europe had had experience of the University system. In emulation of this enlightened monarch, Johns Hopkins left large funds in his will to establish a University to perpetuate his name throughout all time. We might expect to find in its constitution the conclusions to which the best minds have come as regards the higher education. What these are I hope to learn from Dr. William H. Welch, Professor of Pathology in that University.

RESPONSE OF DR. WILLIAM H. WELCH.

Mr. President, Gentlemen of the Harvard Medical School Association, - I esteem it a pleasure and an honor to be invited to participate in this annual dinner. I know something of the zeal and of the high purposes which animate this young Association. I see that your Constitution places first among its objects the advancement of medical education. Every medical man is supposed to be able and willing at all times and places to ventilate his opinions on medical education, and I suppose it is for this reason that your President has asked me to say something on this subject. It is an old and trite and threadbare subject. We know and are agreed as to the deficiencies in our past and existing systems of education. We are perhaps a little tired of the criticisms and of the truths which have become commonplace, which are drummed into our ears incessantly on this subject. But, until we have more nearly reached the goal, this topic is one which will not down. It is a tale which, like that of the ancient mariner, must be told and retold; and we "cannot choose but hear." You will doubtless live through many disquisitions on various aspects of this question on these occasions, and you are wise to fortify yourselves with a good dinner beforehand.

I notice in the report of your first annual meeting held last year that then, as well as to-day, the

speakers have dwelt upon the value of the close union between Harvard Medical School and Harvard University, and have emphasized the importance of strengthening the bond between the School and the University. I know that this idea is thoroughly appreciated here. It is a matter with which I heartily sympathize and upon which I have had the opportunity of expressing my sentiments in an address before This university idea in my own Alma Mater. medical education means a great deal, and it will, I hope, be kept prominent in your aims. The Medical School, according to this idea, is not a mere appendage of the University: it is an integral and co-ordinate part of it, receiving from it and giving to it reputation and glory.

I know that the objection has been raised that a medical school is essentially a technological school, that its function is to furnish a bread-and-butter curriculum, that it cannot rightfully claim to share the privileges of the humanities or to rank with the liberal studies. If admitted under the shelter of the University, it is regarded at best as a child by adoption without legitimate claim to inherit the birthright. You have doubtless heard, as I have, this line of argument amplified.

This position I believe to be wholly indefensible. Dr. Chadwick, in his remarks before you last year and also to-day, clearly showed that it is contrary to history, and our ideas as to what constitutes a University

are largely historical ones. The beginnings of universities in the Middle Ages go back to the School of Medicine at Salernum, and from that School up to the present time the Medical Faculty has been an integral part of most European universities, and of many their chief ornament. Are not to-day in the University of Berlin such men as Virchow, Du Bois-Reymond, Waldeyer, the peers of their colleagues in the other faculties?

But it is wrong to say that a medical school should be essentially a technological one. Medicine is not only a professional study with practical relations: it is also one of the natural sciences; and it should be the function of the University to see to it that this latter aspect, which is not at all incompatible with the former, is not lost sight of. Many branches of medical study, and those the fundamental ones, are just as legitimate and important and worthy objects of liberal education as any of the natural sciences. They yield to none in fascination or in the physiological significance of the truths which they contain and which are to be discovered, and certainly they lose not any dignity because these truths bear upon the physical well-being of mankind. It is true, I believe, that such medical sciences as anatomy, physiology, pathology, are most fruitfully cultivated, even in their relations to practical medicine, when they are regarded also as biological sciences, and the practical relations are not kept too exclusively in view. Here it is, as

with other applied sciences,— with industrial chemistry, for instance,— that the practical applications of the old and the new truths take care of themselves, and that the best results come from searchers who do not make utilitarianism their guiding principle. There is no direction, perhaps, in which the beneficent influence of university ideas entering into and guiding the work of a medical school is more apparent than in the proper adjustment of the relations between the technical and the more purely scientific aspects of medical study.

The ultimate purpose of a medical school is, of course, the training of practitioners of medicine. is to teach how best to prevent, cure, and relieve disease and suffering. But I need not combat here in this presence that narrow and Philistine view which seeks a short cut to this goal, and which fails to see that this training is only to be attained on the basis of a thorough knowledge of what the human and animal body is and does in health and is and does in disease, -a knowledge to be satisfactorily acquired only by the preliminary study of physics, chemistry, and general biology. A medical school which is in close touch with these departments of a well-equipped university, and which is imbued with the university spirit, offers the conditions most favorable for the attainment of these ideals.

Medical education is not completed at the medical school: it is only begun. Hence it is not only the

quantity of knowledge which the student takes with him from the school which will help him in his future work: it is also the quality of mind, the disciplined habit of correct reasoning, the methods of work, the way of looking at medical problems, the estimate of the value of evidence. I remember to have heard Cohnheim say that, when called upon to make post-mortem examinations in private cases for physicians in Breslau where Frerichs had once taught, he could pick out those practitioners who had been under the training of Frerichs by their way of describing and regarding the clinical and pathological features of their cases.

One of the most hopeful signs of the advancement of medical education in this country is the elevation of the standard, not only of those who study, but also of those who teach medicine. A few books and some oratorical gift no longer suffice to make a medical teacher, and the aspirants to professorial honors are no longer expected to begin their apprenticeship with teaching materia medica and to climb up gradually the various chairs until perhaps they reach that of medicine or of surgery. It is true that profound learning does not carry with it of necessity the special gifts of the teacher, but I believe that this point of view has been too much emphasized. well-trained students and the fruitful investigators in their special departments, even if they do not possess the greatest facility of expression, are generally the soundest and most satisfactory teachers.

I believe it would do much to advance medical education and to encourage original research in medicine in this country, if the way were more freely open for academic careers in the sense in which it is in the German universities; that is, if young men who do good scientific work, who publish valuable results of original investigation, and who acquire reputation among those who are competent to judge them, could look forward with some reasonable assurance to securing positions in our leading medical schools. tive of this reward acts as a powerful stimulus to original investigation in Germany. And here, again, the influence of the university will be felt,—the university which is not local and provincial, but is national, and, more than national, international and cosmopolitan.

I trust that in this connection I may be permitted to say that Harvard Medical School has recently given a striking illustration of this genuinely national university spirit in the appointments to its professorship of Pathology and assistant professorship of Physiology. Personally, I cannot regard your selection for the chair of Pathology altogether with composure. You have taken from my right hand my coworker, and you have shorn us of half our strength. We have become so accustomed at the Johns Hopkins University to academic suitors for our young men that our position has been compared to that of the benignant father of a large family of girls in one of

your over-populated, feminine towns in this State, who replied to the young man who graciously requested the privilege of marrying one of his daughters: "Take her, young man, take her. God bless you. Do you know who wants another?" Whatever may be thought of free trade in other matters, free trade in the selection of those who are to fill positions of teachers in our universities is conducive to vigorous development.

We have every reason to be hopeful for the future of medical education in this country. The current has set irresistibly in the right direction. We are going to have a few excellent medical schools, unsurpassed by any in any part of the world; and Harvard Medical School will continue to hold a leading position in this advancement. There is going to be a greater disparity than even now exists between those schools most favorably situated, most wisely conducted, best equipped with laboratories and hospital facilities, and amply endowed, and the great mass of schools which cannot secure these advantages in any adequate degree.

We have our own especial problems to solve in medical education in this country. We may, and we should, profit by the experience of other countries; but we cannot transfer bodily their systems of education to our own country, and it is healthful that we should build up our own methods and institutions, and that our schools should be in the line of develop-

ment from our own special conditions, and adapted to our own institutions and country. You have realized this here to its fullest extent; and I have been very much interested in the efforts which you have made to solve some of these problems, and especially the one which has been touched upon to-day, particularly by Dr. Pepper, pertaining to the advanced age at which those who complete the academic courses in our leading colleges, such as Harvard and Yale, are obliged to begin the study of medicine. These academic courses have developed, heedless of the necessities of the professional schools. The colleges are going to retain, of course, all this development, and will continue to develop further in the same and in new directions; but the result is that we are placed in an embarrassing and an anomalous condition, without parallel in any other country. Various solutions have been proposed for this anomalous state of things. I do not propose to discuss them here. In fact, I know of no place where the case has been more fully presented and more ably discussed than here; but I wish to express my interest in the efforts which you are making to solve these special problems which pertain to the peculiar conditions of our own country.

We fully realize that at the present day a medical school cannot get along with the simple appliances of former times. Large endowments are necessary for laboratories especially, and here in the Eastern States at least we must look to private philanthropy for this purpose. I think experience teaches that the community at large, even the educated community, takes little interest in matters pertaining to medical education and medical legislation. There is no adequate appreciation of the present state of medical science. The very idea that there is any longer room for special schools and sects and dogmas in medicine, any more than there is in physics and chemistry, is evidence of the ignorance of the general public in this There is room here for a campaign of education. Have the needs of medical education for pecuniary support been as clearly and forcibly presented to the public as might be done? Well-equipped laboratories are essential to medical education; and these, if properly conducted, cannot be made selfsupporting. Is it generally known that in the German universities at least three times as much money is spent in the support of the laboratories connected with medical teaching as is spent in the salaries of You cannot, here at Harvard, reach the full height of your endeavor without ample endowment.

Gentlemen, all who have at heart the promotion of the cause of medical education in this country extend their best wishes for the prosperity of the Harvard Medical School and of this Association, which can do so much to aid the good cause. For more than two centuries and a half Harvard University has been a model to other similar institutions in this country. May the Harvard Medical School, which has a history of honor and renown in its teachers and alumni and its achievements, continue to be a beacon light in this new era of medical education,—an era in which we may reasonably hope that the days of the lean kine are to be followed by years of plenty!

The President.— John of Salisbury, in the twelfth century, said: "The professors of the theory of medicine are very communicative. They will tell you all they know, and perhaps out of their great kindness a little more." Whether the same characteristics apply to the professors of the present day you may judge when I present to you Dr. James C. White, Professor of Dermatology in the Harvard Medical School, and President of the Massachusetts Medical Society.

RESPONSE OF DR. J. C. WHITE.

Fellow-Alumni,— I have been asked by our President to say something to you to-day about the new four years' course of our medical Alma Mater. I shall not be able to tell you anything new, I fear; for the plan must already have been made familiar to you by the prospectus, which has been widely distributed, and the lucid explanation at the recent annual dinner of the Massachusetts Medical Society by Professor Fitz, the Chairman of the Committee of the Faculty which has labored so assiduously in its preparation. Still, it would not be fitting that so important a step in the history of our School should be allowed to pass unnoticed before this Association, especially as it looks

to you for encouragement and possible assistance in the early years of its trial.

There have been three periods in the Medical Department of Harvard University marked by great advances in its plan of instruction.

The first was in 1857, when it offered an optional nine-months continuous course in place of the four months of lectures which then constituted the universal American method of organized schools entitled to confer the degree of Doctor of Medicine. at this time that the Tremont Street Medical School, then conducted as a private undertaking by the teachers in the Medical Department to supplement the term of study furnished by the latter, was merged in the system of the University; and many students availed themselves of these extended privileges. at that time a student could get the degree of M.D. from Harvard University by a residence of only four months and by passing a brief oral examination, with a low average in five out of the nine branches taught. In what way the nominal three years time required had been passed was of little concern.

Second, in 1871 the School made its nine-months course compulsory, adopted a graded curriculum extending over three years, and obliged the candidate to pass a thorough examination in every one of the great departments of medicine. Its standard was set so high as to virtually enforce a continuous residence for the full term. This reform, or revolution, as

President Eliot well called it, cujus pars maxima fuit, was accomplished only after a prolonged contest with its opponents within and without the Faculty, and with the foreseen result of a large reduction in the number of students and the income of the School. Then what was also foreseen gradually followed, the demonstration that a great University has a higher function than to make "cheap doctors," and that the profession and the public would support genuine efforts to elevate the character of medical education. The plan became an eminent success, and has been adopted by most of the leading schools of the United States.

You know how we have prospered, how the number of students has increased, how enormously the number of teachers has multiplied, how a new medical college has been built by the generous contributions of our citizens, furnished with extensive laboratories, adapted both for teaching and original investigations, how many new departments have been added to the course of study, and how a preliminary entrance examination and an optional fourth year have been instituted. Such has been the history of the development of the School during the past twenty years.

But, having done so much, could she yet not do more? Two years ago, in a public address on medical education, I expressed the opinion that Harvard "still lacks much of being a great and complete school of medicine," and pointed out in what respects she was inferior to the best medical schools of Europe. Certainly, we may talk frankly of our deficiencies in the house of our friends. Among these desiderata I attempted to show how inadequate was a three-year course of study, and how entirely the optional fourth year had failed to correct this fault in our system. The importance of a required examination in every department taught was also insisted on.

The Faculty has for a long time recognized the importance of an extension of its period of study, but has been deterred from its adoption through fear of its effect upon the pecuniary resources of the School. The cost of conducting its great laboratories and of paying a corps of seventy teachers of all grades, ridiculously inadequate as its scale of salaries has been, is very great. Its income from endowed funds is trivial, so that the School could not be carried on if the income from students' fees should materially It is not to be wondered at, therefore, that diminish. the Faculty has gone slowly in this matter. At last, however, the School, without any assurance of outside support, has boldly put this measure into execution, and has announced that, beginning with the academic year 1892-93, the required course of study will cover four years. That date marks, therefore, the third great period of advance in its history.

The novel features of the plan are: -

(1) The nominal requirement of general chemistry

at entrance; but, as the means of acquiring a sufficient knowledge in this branch do not exist in the preparatory schools in all parts of the country from which our students are drawn, it is evident that a considerable proportion of the entering classes must be conditioned in this study on admission, and that it must hold its place in the first year's curriculum for some time to come.

- (2) The recognition of the possibility of obtaining some knowledge in subjects which have hitherto constituted the first year's course of the School in non-medical institutions of learning before entrance, whereby admission to advanced standing may be facilitated, and the whole period of university residence, including the undergraduate and professional, be reduced to seven years again. Thus students coming from colleges or scientific schools where anatomy, histology, physiology, and general chemistry are taught, may be admitted to the second year on passing an examination in these subjects at entrance.
- (3) More time will be given to practical instruction in clinical chemistry and bacteriology.
- (4) Study of the general clinical branches will be extended over three years instead of being limited to two years, as heretofore.
- (5) An examination will be required in most of the special departments in which instruction is given. This will ensure the attendance of students upon all courses, and at least some knowledge of every disease.

Hitherto students have been permitted to graduate without having received, although given, the slightest instruction in many common diseases they might meet in the first week of their practice.

Electives, I regret to say, still form a material part of the new system of instruction, an examination in them of at least three hours in the fourth year being required. I had hoped that this still all too brief period of four years would have been wholly given to an equable advance in every branch of medicine for every student alike under the direction of his teachers, and that none of it would have been devoted to preparation for special practice, which should be taught only in graduate courses. Certainly, every specialist needs at least four full years of education in general medicine.

Such are the principal changes in the new course provisionally adopted by the Faculty. I need not assure you that, however its individual members may differ in opinion as to some of its features, they will all labor alike to make it a success so far as their own efforts are concerned. But we look upon you, also, as active co-laborers in our undertaking. There is not a member of this Association who cannot do missionary work in this attempt to elevate the standard of medical education, and thus the profession of medicine in this country. This is especially true of those who live beyond the immediate districts from which our students are generally drawn. You can one and

all do much by advising students and your colleagues where the most thorough medical training which this country affords may be obtained. They can be made to feel that they are thus contributing to the success of our undertaking.

But there are other interests of the Medical School, in the promotion of which you can take an active part, to which I ask permission to again call your attention in the briefest manner.

It is highly important that our profession should be properly represented on the government of the University. Twice within a brief period have matters of vital consequence to us been acted upon by the Board of Overseers, in the decision of which the medical vote has formed but a trivial fraction. nately, one of the most accomplished and efficient members of this Association has recently become one of the Corporation; but there are only three physicians among the thirty persons who constitute the elective governing body. It is very important for the interests of our School, and for the consummation of the University as a whole, that suffrage should be extended to all members of this Association, as well as to the alumni of the other great professional schools. This can be accomplished only by persistent and concentrated effort on the part of the voting members of They must unite in the selection of candidates for the position of overseer who are known to favor such broad views of the meaning and adminis-

tration of a University. Had such action been taken previous to the coming election, there can be little doubt that the name of our esteemed President might have found a place upon the official ballot to-morrow. It is as essential that the opinions of every candidate for this office with regard to such vital questions as the interests of the professional departments should be known publicly, as the views of those for whom we vote to represent us in national politics. We must elect men who are alive to the present needs of the University, not those who are ruled by tradition alone. We do not expect that our representatives of to-day shall make the laws which are to govern the unforeseen events of our remote posterity, no more should they fail to recognize the limitations of prescience in those of the distant past. Harvard University was not dreamed of by the founders of Harvard The University has need of all the Harvard Clubs, of every Alumni Association; and she should do everything to encourage them to work with and for her.

It may fairly be demanded, moreover, that the transactions and votes of our representatives, the Overseers, shall be made more widely public, that electors may know who are fit candidates for re-election, and how to vote understandingly in the future.

It should not become an impossible thing for a young man to graduate both in the arts and in medicine in our University; yet, with the extension of the

period of professional study, this is a result that threatens us. It should be your duty to see to it that the early training of our profession shall be kept as high and liberal as possible.

It has been said, I know, in connection with some recent agitation of these and other questions relating to medical education, "Oh, the doctors want the earth." Yes, they do want their share of it, and this is a considerable and important part of the University at least. They certainly have not had it thus far, and they will not get it without working for it themselves. In the united and determined efforts of this large, organized, and influential body of alumni have we not the force which shall gradually bring the right to pass?

PROVISIONAL SCHEDULE

PROVISIONAL ANNOUNCEMENT OF THE GRADED FOUR YEARS' COURSE OF INSTRUCTION.

To go into effect, September, 1892.

(Applicable to students entering the First Class at that time.)

General Chemistry will be a requirement for admission in and after June, 1893.

Students conditioned in General Chemistry at the examination for admission will be furnished, in the School, during the first year, with opportunities for making up this condition.

Applicants for admission to the Medical School who shall have studied three years in recognized colleges, technical or scientific schools, in which courses in Anatomy, Physiology, Histology, and General Chemistry are a part of the instruction, may be admitted to advanced standing, provided they pass an examination in these subjects.

The Lawrence Scientific School has established a course in Anatomy, Physiology, and Hygiene, the first two years of which are approved as a preparation for the four years' graded course in Medicine here offered.

The following Tabular View indicates the number of hours of instruction for each student in each subject and the nature of the exercise.

Fractions are subdivisions of eighteen, the number of weeks, exclusive of holidays and vacations, in the half-year.

TABULAR VIEW .- Hours per week for each student.

FIRST YEAR .- First Half.

	Anatomy.	Physiology.	Histology and Embryology.	Medical Chemistry.	Hygiene.	Bacteriology.	Total.
Lectures	4	3	2	_	1	_	10
Recitations	ī	ī	_	_	_	_	2
Conferences	_	_	_	_	_	_	_
Clinical Exercises	! _	_	-	_	_	_	_
Demonstrations	I	1	-	_	_	_	2
Laboratory Exercises	4	ī	4	-	-	_	9
Total	10	6	6	_	ī	-	23

FIRST YEAR .- Second Half.

	Anatomy.	Physiology.	Histology and Embryology.	Medical Chemistry.	Hygiene.	Bacteriology.	Total.
Lectures	2	3	ı	2	_	ı	9
Recitations	1	1	_	_	_	_	2
Conferences	-	1	_	_	_	_	1
Clinical Exercises	_	_	_	_	-	_	-
Demonstrations	I	1	_	_	_	_	2
Laboratory Exercises	4	τ	4	4	_	1	14
Total	8	7	5	6	-	2	28

SECOND YEAR.—First Half.

	Anatomy.	Pathology and Path. Anatomy.	Clinical Chemistry.	Materia Medica and Therapeutica.	Theory and Practice.	Clinical Medicine.	Surgery and Clinical Surgery.	Total.
Lectures	4	2	2	2	_	_	_	10
Recitations	-	2	_	_	2	_	_	4
Conferences	-	-	_	_	- 1	_	_	
Clinical Exercises	_	_	_	_	_ '	2	2	4
Demonstrations	-	_	-	_	_	-	5	5
Laboratory Exercises	-	4	2	-	-	3	2	11
Total	4	8	4	2	2	5	9	34

SECOND YEAR .- Second Half.

	Anatomy.	Pathology and Path. Anatomy.	Clinical Chemistry.	Materia Medica and Therapeutics.	Theory and Practice.	Clinical Medicine.	Surgery and Clinical Surgery.	Total.
Lectures	4	2	τ	2	-	-	_	9
Recitations	_	2	_	_	2	_	-	4
Conferences	! _	-	I	_	_	-	_	I
Clinical Exercises	; -	-	_	_	_	2	2	4
Demonstrations	i -	-	! _	_	! -	· _	4	4
Laboratory Exercises	-	4	2	-	-	2	2	10
Total	4	8	4	2	2	4	8	32

THIRD YEAR .- First Half.

	Theory & Practice.	Clinical Medicine.	Surgery.	Clinical Surgery.	Obstetrics.	Pædiatrica.	Dermatology.	Neurology.	Gynæcology.	Mental Diseases.	Total.
Lectures	2 - - 2 -	- t 6 -	3	2 - 1 2 4 -	2 1 1 - -	1 - - 2 -	1 - 1 -	 - - 1 - -			11 3 14 1 4
Total	4	7	3	9	41	3	2	I	-	-	331

THIRD YEAR .- Second Haly.

	Theory & Practice.	Clinical Medicine.	Surgery.	Clinical Surgery.	Obstetrics.	Pædiatrics.	Dermatology.	Neurology.	Gynæcology.	Mental Diseases.	Total.
Lectures	2	_	2	2	2	ı	ī	_	ı	ı	12
Recitations	-	Í -	-	-	1	i -	-	_	-	_	I
Conferences	-	1	-	1	ı	1	_	_	i –	_	31
Clinical Exercises	2	6	-	2	¥	2	1	ı	ı	_	151
Demonstrations	-	-	-	4		_	-	-	-	-	4
Laboratory Exercises .	-	-	-	-	-	-	-	-	-	-	-
									-		
Total	4	7	2	9	41	3 1	2	I	2	1	35 3

	2d Half-year.		1st Half-year.		
Total	Lectures	Total	Lectures		
N	110111	2	11811	Clinical Medicine.	
6	111041	6	111841	Clinical Surgery.	
-		-		Clinical Microscopy.	
-	11-11	-	11-111	Genito-urinary Surgery.	
caj		ŀ	11111	Ovarian Tumors.	
top	100	-	11-11	Mental Diseases.	
-	1-1111	ı		Municipal Sanitation.	
14-	K4-	1	11111	Cookery.	
1	11111	w	11811	Ophthalmology.	
1	11111	ω	11811	Otology.	
ı	11111	ы	11-11-	Laryngology.	
1	11111	coho		Orthopædics.	
1	11111	w	1 - 1 1 8	Legal Medicine.	
17 14-		ю	11-11-	Syphilis.	
134	15 85 1 80 1 80 1 80 1 80 1 1	24 (4)	12 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Total.	
6	110111	ı	11111	Ophthalmology.	
6	110111	ı	1 1 1 1 1 1	Otology.	
Ю	11811	1	11111	Orthopædics.	
2	11	2	1 1 1 1 1 1	Gynæcology.	
ю	11811	2	11811	Dermatology.	
ω	110111	ω	110111	Neurology.	E
1	11111	4	11114	Bacteriology.	ELECTIVE.
2	811111	ю	011111	Physiology.	ř.
8	11111	Ю	011111	Chemistry.	
1	11111	-	-11111	Hygiene.	
- I		1	11111	Operative Surgery.	
1	11111	0 /01	1 1 1 1 cop-	Operative Obstetrics.	
27	5 1 20 g 1 1	171	10 m m	Total.	

EXAMINATIONS.

(At the end of the year, unless otherwise stated.)

First Year.

Subject.		I ir	ength hours.	Character.
Anatomy			2	Written & practical.
Physiology			3=2	Written + oral, & practical.
Histology			I	Practical. End of 1st half-year.
Medical Chemistry				
Bacteriology	•		1	Written & practical.
			81	-

Second Year.

Subject.	i	ength hours.	Character.
Advanced Anatomy . Pathological Anatomy			Written. Written & practical.
Clinical Chemistry . Mat. Medica & Therapeu		2 2	Written.
		9	

Third Year.

Su	ıbje	ct.				I it	ength hours.	Character.
Theory & Pi	rac	tice	9				3	Written.
Surgery .								44
Obstetrics								" & cases attended.
Pædiatrics								" & practical.
Dermatology	7		•				I	"
Neurology			•	•			I	"
Gynæcology	•		•		•	•	I	44
Mental Dise	ase	es:	•				I	44
							15	

Fourth Year.

Subject	:•			ength	Chara	cter.	
Clinical Medicin	e			3	Written &	& practical.	
Clinical Surgery				2	44	• "	
Orthopædics .				I	"		
Ophthalmology				1	44)	
Otology				I	66	l	
Laryngology . Legal Medicine				I	"	End of 18	t half-year.
Legal Medicine				ſ	44	Ì	,
Syphilis				1	44	j	
,.			-			-	

Fourth Year .- Continued.

	Subject.					ength hours.	Character.	
1	Gynæcology					2	Written.	
	Dermatology					2	"	
	Neurology .					2	"	
. i	Ophthalmology	7				2	44	
3	Otology					2	44	
17.	Orthopædics					2	44	
Electives.	Physiology .					1	44	
2	Chemistry .					I	46	
7	Operative Surg	zei	rv			I	"	
	Operative Obs	te	tri	cs		I	")
	Bacteriology	•				Ī	44	End of 1st half-year.
į	Hygiene .					I	46	
	, , , , , , , , , , , , , , , , , , , ,				-	18		,

In the fourth year, at least three hours of examinations in electives are obligatory.

Students intending to elect Dermatology, Neurology, or Gynæcology in the fourth year need not pass an examination in these subjects at the end of the third year, provided their choice is made at the beginning of the second half of the third year.

Students electing Ophthalmology, Otology, or Orthopædics in the fourth year are obliged to pass only the two hours' examination in these subjects at the end of the year. Only one hour of these two can count as an elective.

Candidates for the degree who shall have served satisfactorily as internes in the Massachusetts General Hospital, Boston City Hospital, Carney Hospital, and Children's Hospital for a period of not less than one year may be exempt from examination in the electives of the fourth year.

The fees for the first three years remain as at present, two hundred dollars for each year; and the fee for the full year to all students entitled to be classified as fourth-year students will be one hundred dollars.

These fees cover all school expenses, except a sum not exceeding \$10 for anatomical and chemical material.

A list of the boarding-houses in the vicinity of the School can be obtained from the Janitor, the rates of charges varying from \$5 to \$10 a week.

At the end of the four years of study the degree of Doctor of Medicine will be given to those students who have fulfilled its requirements. This degree cum laude will be conferred upon candidates who have obtained an average of over 75% in all the required examinations.

Students who began their professional studies elsewhere may be admitted to advanced standing; but all persons who apply for admission to the advanced classes must pass an examination in the branches already pursued by the class to which they seek admission, and furnish a satisfactory certificate of time spent in medical studies. No student may advance with his class, or be admitted to advanced standing, until he has passed the required examinations in the studies of the previous year, or a majority of them; nor may he become a member of the third class until he has passed all the examinations of the first, in addition to a majority of those of the second year; nor of the fourth class, until he has passed all of the examinations of the first and second, in addition to a majority of those of the third year.

The year begins on the Thursday following the last Wednesday in September, and ends on the last Wednesday in June. There is a recess at Christmas, beginning December 23 and ending January 2, and a spring recess, beginning on the Wednesday before Fast Day and ending on the following Tuesday, inclusive.

For further information, address Dr. H. P. Bowditch, *Dean*, Harvard Medical School, Boylston Street, Boston.



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BULLETIN

OF THE

HARVARD MEDICAL SCHOOL ASSOCIATION

NUMBER 4



Boston: Published by the Association

May, 1893

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CONTENTS.

	PAGE
List of Officers,	
Nоте,	7
A SPECIAL MEETING OF THE COUNCIL,	9
THE PROFESSIONAL HORIZON. BY D. W. CHEEVER, M.D.,	11
THE EXHIBIT OF THE MEDICAL SCHOOL AT THE WORLD'S FAIR.	
BY HENRY P. BOWDITCH, M.D.,	19
THE OBSTETRICAL DEPARTMENT OF THE HARVARD MEDICAL	
SCHOOL. BY WILLIAM L. RICHARDSON, M.D.,	28
THE PATHOLOGICAL DEPARTMENT OF THE HARVARD MEDICAL	
SCHOOL. BY WILLIAM T. COUNCILMAN, M.D.,	35
DIPHTHERIA AND SCARLET FEVER AT THE BOSTON CITY HOS-	•
PITAL. By A. L. MASON, M.D.,	47
THE TEACHING OF MATERIA MEDICA AND THERAPEUTICS. BY	
Charles Harrington, M.D.,	61
Correction,	

OFFICERS

OF THE

HARVARD MEDICAL SCHOOL ASSOCIATION.

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1871. JAMES READ CHADWICK, . 270 Clarendon St., Boston, Mass.

Dice-Presidents.

1878.	CHARLES PARKER BANCROFT,	Concord, N.H.
1856.	CHARLES EDWARD BRIGGS,	2747 Olive St., St. Louis, Mo.
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1868.	VERNON OTIS TAYLOR,	Box 1459, Providence, R.I.
1868.	JOHN ORDWAY WEBSTER,	59 State St., Augusta, Me.

Areasmrer.

1875. WALTER ELA, 62 Brattle St., Cambridge, Mass.

Secretary.

1885. ROBERT WILLIAMSON LOVETT, . 379 Boylston St., Boston, Mass.

Councillors.

FOR THE TERM ENDING IN 1896.

1861. FRANCIS HENRY BROWN, . . . 75 Westland Ave., Boston, Mass.
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1864. SAMUEL WOOD LANGMAID, . . 373 Boylston St., Boston, Mass.

FOR THE TERM ENDING IN 1895.

- 1870. CHARLES FOLLEN FOLSOM, . . . 15 Marlboro St., Boston, Mass.
- 1863. GEORGE EBENEZER FRANCIS, . . 79 Elm St., Worcester, Mass.
- 1854. LINCOLN RIPLEY STONE, . . . Newton, Mass.

FOR THE TERM ENDING IN 1894.

- 1874. WILLIAM STURGIS BIGELOW, . . 60 Beacon St., Boston, Mass.
- 1865. SILAS DEAN PRESBREY, . . . Taunton, Mass.
- 1864. FRANCIS MINOT WELD, . . . Storey Pl., Jamaica Plain, Mass.

FOR THE TERM ENDING IN 1893.

- 1859. JOHN TAYLOR GILMAN NICHOLS, 63 Brattle St., Cambridge, Mass.
- 1865. EDWARD WIGGLESWORTH, . . . 188 Beacon St., Boston, Mass.
- 1883. Alfred Worcester, 742 Main St., Waltham, Mass.

NOTE.

This Bulletin, which appears under the auspices of a joint committee, consisting of two members from the Faculty of the Harvard Medical School and two members from the Council of the Association, is intended to give to the graduates of the School a brief account of certain new methods of teaching which have arisen in the various departments of the School. It has been hoped by the Committee that this might be of interest to the older graduates, and especially to those of the Alumni who live at a distance from Boston. In addition to these papers one or two matters of general interest have been touched upon.

Whether or not such a Bulletin as this becomes a regular publication will depend entirely upon the reception which it meets among the graduates of the School.

A SPECIAL MEETING OF THE COUNCIL.

A meeting of the Council of the Harvard Medical School Association was held at 19 Boylston Place on Feb. 10, 1893, at 12 o'clock. Dr. Chadwick presided, and Dr. J. Collins Warren was present by invitation as a representative of the Faculty of the Medical School. The object of the meeting was to decide in what way the Harvard Medical School might be most helped by the accumulated income of the Association. Dr. Warren presented the views of the Faculty as to the needs of the School; and, after some discussion as to the advisability of establishing scholarships, etc., the matter was decided by a unanimous vote. It was voted to take action in two ways. First, to invite Professor H. C. Wood, of Philadelphia, to give a series of lectures upon Therapeutics to the students and Alumni of the Harvard Medical School; and the President of the Association was empowered to arrange matters with Dr. Wood.

Second, to publish a Bulletin containing information about the Medical School, especially calling attention to the later modes of instruction in some of the departments. The President and the Secretary were appointed a committee to publish said Bulletin in conjunction with the Faculty of the School.

It was voted that not over \$650 should be spent upon the lectures and the Bulletin.

Professor Wood's lectures are to be delivered at the Harvard Medical School on April 27 and 28, May 4, 11, and 18. Among the subjects treated are the following:—

- 1. Heart Stimulants and Heart Depressants.
- 2. Opium: A Study in Physiological Interpretation and the Treatment of Narcotic States.

THE PROFESSIONAL HORIZON.

BY DAVID W. CHEEVER, A.B., M.D.,

PROFESSOR OF SURGERY IN THE HARVARD MEDICAL SCHOOL, SENIOR SURGEON OF THE CITY HOSPITAL OF BOSTON.

Audi alteram partem.

The master mariner in olden times scanned the horizon, watched the currents, estimated the tides, studied the winds to guide the good ship on her course. All these were variable and changeable; but the magnetic needle, the sun, moon, and stars were unvarying guides. So the modern steamship master may disregard the winds, surpass the tides, defy currents and storms; but yet he is always dependent on the compass, the quadrant, and his solar or stellar observations for his position, his progress, and his prospective voyage.

Thus, too, the older surgery, contending with obstacles and evading dangers, by its care and skill, although by devious routes, often landed its patient safe at last.

While modern methods, more rapid and direct, may lead straight on to recovery and to life, yet, although newer observations, newer science, newer instruments of precision, may modify and may advance modern surgery and medicine, the principles of the science and art remain the same as they were before; and, if disregarded, they lead to failures in practice, or at best to temporary success.

In scanning, like the old sailor, the professional horizon, may we not learn from the omens of storms or calms, where we have gone astray from the unerring guides of sound professional principles?

The unbalanced predominance of operative surgery has destroyed all natural and harmonious proportion between operations and surgery; and between surgery and medicine. Antisepsis has insured an immunity which over-emboldens the operator, and which substitutes the precipitate certainty of an incision for the well-considered conservatism of diagnosis and delay. No one can deny that anæsthesia first, and antisepsis next, have enormously increased the domain of operative surgery. No one can assert that much of this is not both useful and hopeful. And yet, in proportion to other surgery, operations should fill a second place. The rare has become the common, and the common has been pushed aside and neglected. Contusions, abscesses, fractures, varicosities, atheroma, are the every-day things we always see; and abdominal diseases have usurped undue attention, and displaced the common classes of surgical events.

Diseases of the joints, affections of the lymphatic glands, maladies of the bones, ulcers, the endless variety of affections of the rectum in modern sedentary life,—these, like the poor patient, we have always with us. Such cases filled the text-books, and supplied a large part of the surgeon's practice. to-day, if the student or practitioner opens the pages of the present surgical text-books, he finds that genitourinary surgery and that of the abdomen and the brain occupy one-third of the space. Pages are devoted to the multiple and fancy stitching of an intestine, and a paragraph suffices for piles; yet one hundred people have piles, and require treatment from the surgeon, to one who has intestinal obstruction. The new is interesting, the new is important; but it Perspective is lost: the natural proporis overdone. tions of classes of cases obscured. Rare things are magnified: common things are overlooked.

There is also constant danger of confounding functional and temporary with organic and permanent conditions: of operating for a symptom, and finding a phantom tumor. Visceral surgery replaces therapeusis. Forlorn hopes are common operations. Exploratory incisions made for diagnosis may be often innocuous where no disease is found, but are very fatal where organic and incurable affections exist. It used to be said that it was fatal to explore a tumor, outside the body, unless you could take it out. It is equally dangerous and often fatal to explore a visceral tumor, in spite of antisepsis.

Is there not danger, also, that the ease of looking breed littleness of wit; that intuition, that sum of experience, may shrink and waste, when unused; that the balancing of chances; the estimating of probabilities, the struggle for a diagnosis, may be belittled in face of reputed certainties revealed by a cut, and thus delay sober judgment? Is not the therapeutic use of drugs also much unlearned by this fatal ease of operating? Obscure brain affections, nervous habits, apparently organic and incurable growths, sometimes yield to medicine, and escape the knife. We may not often thus succeed; but does not the fact that we do not try medication lead finally to a loss of knowledge as to the chances of a trial?

Specialties magnify regions, distort wider vision, focus the attention on a point and ignore a more important whole. A diathesis, a constitutional bent, often directs or influences the general progress of a disease. A symptom may be local, or general. If local, it is seen; if general, it may be easily overlooked. Habit may perpetuate an epileptic crisis in spite of the operative removal of the local cause of the aura. A vent boldly given to a subarachnoid hemorrhage may not prevent a fatal result due to the plugging of the nutrient vessels of the pia mater. Clots in the spinal canal may be absorbed, sometimes, with less hazard than by removing the laminæ and uncovering the spinal cord.

The treatment of the diseases of women has become almost purely operative. Attention to constitutional treatment is thus easily diverted.

The sexual maniac is spayed, often without lasting relief. Pelvic cellulitis and peritonitis not very rarely are lighted up by hasty interferences with the interior of the uterus.

Life is occasionally shortened by too early removal of innocent growths about the ovaries and uterus. So intensely has the attention been called to the right iliac fossa, that an appendicitis is suspected in every colic; incisions are sometimes made before walling off has occurred; an organ removed which was the seat of only temporary catarrhal obstruction, and the adhesions of an excision substituted for the adhesions of a transient inflammation.

Is any incision harmless? Certainly it is not. A scar is left; sensibility is increased. If in the abdomen, the binding power of the fasciæ is weakened. Hernia may result; or, at any rate, prevention may require an abdominal supporter to be worn ever afterwards. In gunshot wounds of the intestines a certain percentage of cases may recover without operation. Extravasation may be prevented by the pouting of the mucous membrane through the perforation of the ball; and the latter may be discharged per rectum. Of course, the majority die. But so, unfortunately, do most of those operated on. The history of such cases is scanty, the pathology new, the results few. Let us by no means discourage research, experiment, or even operation; but let us make haste slowly.

In the charm of asepsis, in the ease of healing, in the painlessness of operations and of recoveries, we are apt to overlook that great factor, shock. The effect upon the nervous system of a disease, an injury, an operation, is hard to estimate. It often turns the scale against recovery. Especially about the neck; in the three great cavities of the body; in any operation on the extremities which approaches the centre, the results of prolonged and teasing operations are often fatal through profound and prolonged shock. It has been recently advanced that age makes little difference in the prognosis of an operation,—an opinion from which we absolutely differ. No one who has watched the old but has seen prolonged shock of the nervous system, and evidences of impaired mental activity, long subsequent to operations of even moderate severity.

The somewhat ungrateful task of advancing heretical opinions, in the preceding remarks, can be condoned only from our profound conviction that the operative *furor* of modern surgery is resulting in a serious detriment to the best qualities of sound diagnosis, sound pathology, and surgical therapeusis: to diagnosis, because we do not exhaust means of harmless research; to pathology, because we operate to know what is the matter, and not from proved pathological processes and results; to therapeusis, because we neglect much that can be accomplished by regimen, by rest by sedatives, by alteratives and by time.

When we survey the medical horizon, we find equally great changes. That harmony of knowledge and character which made the general practitioner many-sided, but symmetrical,—"Sapiens, teres, atque rotundus" (Horace); that self-reliance which equalized extremes, balanced chances, judged impartially,—have been sadly damaged by the fatal facility of the habit of consultations and by the narrowing spirit of specialism.

A great ignorance of the simpler products and processes of pharmacy has accompanied as great a lack of careful study in therapeusis. The medicine is now made to hand for the doctor by steam and chemistry; and the useful combinations of older drugs are swept aside.

Bred myself in an era of therapeutic nihilism, experience has failed to confirm my unbelief. On the contrary, long trial has convinced me that we can accomplish much with a few, well-selected, familiar and potent remedies.

If the surgeon and physician have changed, the lay public has changed faster. Credulity is undiminished. Modern witchcraft rivals the older kind. Therapeutic nihilism has become a system and a school of medicine. Practice has lost its stability. Formerly there was a family physician, whose patients retained him as a familiar and much used fixture until he died. Now he shares a family with others; and he does not look on any person as his patient for life.

This is a greater loss to the community than to the doctor. We regret, but we yield to these revolutions.

Meanwhile should we take a depressing view of our professional future? By no means; for never was surgical and medical science so bold, so advancing, so successful. Never was the young doctor so well educated as now. Never had he so large a clinical experience before entering on practice.

Moreover, partly from this cause, and partly from the mutable character of modern society, the young physician or surgeon never succeeded so fast, as now.

The future is full of hope. Knowledge advances. Hygiene and preventive medicine prolong the average of life. Zymotics are to be stamped out. Bacteriology is to revolutionize therapeusis.

We, who have once ploughed the land, look back across the furrows of time, and gather new hope, as we see the renewed greenness of the fields of science, cultivated as they have never been before.

Only would we insist on the caution begot of experience, on the value of the past.

Let us advance firmly and with a confident heart, still holding fast to that which is good. The magnet does not vibrate. The sun and stars are eternal in their courses. Nothing can deflect from his course him who studies, hopes, believes, works.

THE EXHIBIT OF THE HARVARD MEDICAL SCHOOL AT THE CHICAGO WORLD'S FAIR.

BY HENRY P. BOWDITCH, M.D.,

PROFESSOR OF PHYSIOLOGY AND DEAN OF THE HARVARD MEDICAL SCHOOL.

In contributing to the educational exhibit at the World's Columbian Exposition, the Medical Faculty has had a threefold object in view. It has attempted, in the first place, by means of a series of photographs and charts, to present to those interested in educational matters a vivid and correct picture of the facilities for medical teaching which are at the disposal of the School, and a comprehensive view of the growth of its various departments. In the second place, it has endeavored by the display of busts of distinguished physicians who have been in times past connected with the School, and of instruments and apparatus marking the steps in the progress of important inventions, to give to the exhibit a personal and historical character which will, it is hoped, materially enhance the interest which it will awaken. Thirdly, without undertaking to exhibit complete laboratory equipments, it has been thought well to display certain instruments, pieces of apparatus, and

methods of work which have originated in the School and are in actual use for purposes of teaching and research. The articles thus displayed may be regarded as characteristic of the laboratories in which they originated.

Among the charts which are exhibited, one of the most interesting is that which shows the variations in the number of students from the early part of the century till the present time. On this chart it is easy to trace the effect of the introduction of the graded course of study in 1871. 1868 and 1873 the total number of students in the School dropped from 386 to 170, and the number of the graduating class from 100 to 30. Since that time there has been a steady and, of late years, a very rapid increase in numbers, the catalogue for the current year showing 451 students in the School and 93 graduates at the last Commencement. The same chart also shows the gradual increase of the Faculty from 6 to 28 members, and of the other instructors from 1 to 47. The lines thus exhibit to the eye a vivid picture of the growth of a medical school from very small beginnings to a state of great prosperity under the old system, by which students were turned into doctors with a minimum of expense and trouble to their instructors. This is followed by a period of reduced attendance due to voluntary abandonment by the Faculty of a defective system, the establishment of a graded course of instruction, and the requirement of a much higher standard for the degree of M.D. This finally gives place to an era of greater prosperity than ever before, as the advantages which the School had to offer became more fully appreciated.

Another chart represents the annual variations in the income and expenses of the School, and thus presents a picture of its financial condition from year to year; while still another shows the increase in the number of microscopes owned by the School and used by the students, thus affording an excellent measure of the advance made in accurate methods of teaching medical science.

The group of busts will doubtless be to many visitors the most interesting portion of the Medical School exhibit, for here will be seen the forms and features of many of the men whose labors have contributed to place the School in the high position which it occupies among the medical schools of the country. Two of the three members of the original Faculty appointed in 1783 - namely, Drs. John Warren and Benjamin Waterhouse — are represented in this group. Of the third member, Dr. Aaron Dexter, Erving Professor of Chemistry and Materia Medica 1783-1816, no authentic likeness can be procured. Dr. John Warren, Hersey Professor of Anatomy and Surgery 1783-1815, a younger brother of Dr. Joseph Warren of Revolutionary fame, was for nearly forty years the foremost surgeon of New England. Dr. Waterhouse, Hersey Professor of Theory and Practice of Physic 1783-1812, will be chiefly remembered on account of his bold advocacy of vaccination, which at that time had to encounter the ridicule of the profession and the public.

The other busts in the group represent: -

Dr. J. C. Warren, Hersey Professor of Anatomy and Surgery 1815–1847, son of Dr. John Warren, one of the founders of the Massachusetts General Hospital and, until his death, its principal surgeon.

Dr. James Jackson, Hersey Professor of Theory and Practice of Physic 1812–1836, during a long life a leading practitioner of Boston.

Dr. Jacob Bigelow, Professor of Materia Medica 1815–1855, distinguished as a botanist and as a writer on medical and educational subjects.

Dr. H. J. Bigelow, Professor of Surgery 1849–1882, son of Dr. Jacob Bigelow, well known for his works on the hip joint and the rapid removal of vesical calculi.

Dr. E. H. Clarke, Professor of Materia Medica 1855–1872, a successful teacher and writer on educational and psychological subjects.

Dr. H. I. Bowditch, Jackson Professor of Clinical Medicine 1859–1867, Chairman of the Massachusetts State Board of Health 1869–1879, and well known for his advocacy of the treatment of pleuritic effusions by thoracentesis.

Of the professional labors of these men it is unnecessary to speak to members of the medical profes-

sion. The School will ever cherish their memories as those of teachers whose eminence in their chosen profession contributed very largely to that of the School to whose service they devoted their time, talent, and untiring energy.

One of the most striking portions of the Medical School exhibit is the collection of bone models shown by the anatomical department. These models, which are made of paper pulp by Mr. J. H. Emerton under the direction of the Professor of Anatomy, represent all the principal bones of the body enlarged from three to six diameters. They are remarkable for their accuracy and for their extreme lightness, and supply to the anatomical department what are believed to be absolutely unrivalled facilities for teaching osteology in a large lecture-room. This department also displays a fine series of frozen sections ingeniously mounted in such a way that both sides may be readily examined, a number of corrosion preparations, - some made with celloidin and others with fusible metal injections,—and a series of bone sections illustrating the structure of the spongy bones.

The Physiological Department exhibits a number of pieces of apparatus for physiological research which have originated in the laboratory, and have been found useful in original investigations. Among them may be mentioned:—

1. An induction apparatus, in which the intensity of the induced current is regulated by withdrawing

the secondary coil a short distance from the primary coil and then rotating it round a vertical axis through 90°. In this way the intensity of the induced current is reduced to zero without giving to the apparatus the inconvenient length of the ordinary Du Bois-Reymond apparatus.

- 2. A plethysmograph, in which the water, the displacement of which measures the varying volume of the organ under examination, is received into a cylindrical vessel suspended from a spiral spring the length and elasticity of which are so adjusted that a given weight of water stretches the spring by an amount exactly equal to the rise of the water in the vessel. The absolute level of the water thus remain ing constant, the surface of the organ is not subjected to any changes of pressure, which is an essential condition in plethysmographic work.
- 3. An electrical interrupter, in which a vibrating steel rod, making and breaking a mercury contact, is clamped between steel rollers, by changing the position of which on the rod the length of the vibrating portion, and consequently the rate of vibration, may be varied within quite wide limits.
- 4. A reaction time apparatus, consisting of a tuningfork carrying on one of its prongs a smoked card, on which a Deprèz signal magnet writes a curve of sines when the vibrating fork is drawn under it. The sliding of the fork gives a signal by breaking an electric circuit, which is again closed by the reaction of the

individual experimented upon. As the Deprèz magnet is included in this circuit, the time of the reaction is measured by the number of vibrations recorded in that portion of the curve of sines which is drawn a little to one side of the main line.

- 5. A photograph of Dr. J. J. Putnam's pendulum myograph. The peculiarity of this instrument is that the record is made upon a card graduated empirically in such a way that the spaces between the lines correspond to intervals of o.o." in the swing of the pendulum.
- 6. Dr. F. W. Ellis's piston recorder. A substitute for the Marey drum, and especially adapted to plethysmographic work.
- 7. A set of apparatus, of simple form and construction, designed for the use of students in studying the physiology of the nerves, muscles, heart, cilia, etc.

To illustrate its facilities for teaching, this department exhibits also:—

- 1. A large model of the eye, designed to demonstrate to a large class the course of the rays of light in normal, myopic, and hypermetropic eyes, and also the phenomena of spherical aberration, astigmatism, the inversion of the image on the retina, and the three reflected images used in studying accommodation.
- 2. A large working model of the larynx, showing the movements of the laryngeal cartilages upon one another.

The exhibit in the department of Children's Dis-

eases represents by means of sixteen panels, each 5 x 3 feet, the advances which have been made in the subject of the artificial feeding of infants. The analysis of numerous good but varied human milks are given, also the analysis of the milk of cows of different breeds which are suitable for infant feeding, and the methods employed for modifying cows' milk so as to adapt it to the needs of infants of various ages and conditions. Pictorial representations of the new milk laboratory are shown, together with the actual apparatus employed in collecting, modifying, and distributing the milk. A very interesting feature of this exhibit is a new form of incubator for premature infants, the mechanism of which is in many respects decidedly novel. The temperature admits of most accurate adjustment. The fresh air is forced by a fan driven by clock-work through cotton, and, thus filtered, is drawn through the incubator and out of the ventilating shaft. By a special contrivance oxygen may be introduced into the air chamber. infant's bed is supported on the platform of a finely constructed scale, so that the infant can be weighed at all times without removing it from the incubator. The apparatus is made entirely of polished copper and block tin, and in parts is nickel-plated, so that complete disinfection can be carried out on the removal of the infant preparatory for the next case.

The exhibit of the Bacteriological Department consists of various forms of apparatus for research which

have originated in the laboratory, cultures in flasks, and drawings of organisms which have been discovered or investigated in the laboratory.

In the department of Surgery the attention of the visitor will be attracted by the exhibition of the various forms assumed by the late Dr. H. J. Bigelow's apparatus for rapid lithotrity with evacuation before it became the perfect instrument now well known to the surgical world. Here are also shown models of limbs used in the course on bandaging, and illustrating the method of making various surgical applications to the human body.

The department of Otology exhibits a very fine series of preparations of the osseous anatomy of the ear, which cannot fail to secure the admiration of all those who can appreciate the amount of skill and patience required for their production.

A new form of apparatus for air analysis is exhibited by the department of Hygiene. The Warren Anatomical Museum shows several specimens illustrating methods of mounting and preparation in use in that department of the School.

Visitors to the Exposition who desire further information in relation to the School can obtain on application a pamphlet giving details of the various courses of instruction.

THE OBSTETRICAL DEPARTMENT OF THE HARVARD MEDICAL SCHOOL.

BY WILLIAM L. RICHARDSON, M.D.,

PROFESSOR OF OBSTETRICS, VISITING PHYSICIAN OF THE BOSTON LYING-IN HOSPITAL.

During the last twenty years many changes have taken place as regards the methods of giving medical education. The tendency has been to increase the amount of clinical and to diminish the didactic teaching.

In the Obstetrical Department of the Harvard Medical School many changes, with this end in view, have been made. The didactic lectures are still given twice a week throughout the school term, and an operative course, lasting two weeks, with practical exercises on the cadaver and manikin.

A clinical conference has been added to the course, and is held weekly. Two or three cases which have occurred in the practice of the members of the class are selected, so as to illustrate some special subject. The records of these cases are read before the class, the members of which then criticise and question the readers; and, finally, the instructor sums up the cases, making such comments as occur to him, and answering any questions that may be asked.

The most marked change in the department has been in the introduction of a great amount of clinical instruction. Formerly a few cases of obstetrics were placed at the disposal of the Professor of Obstetrics by the physicians connected with the Dispensary. These cases, owing to the limited supply, were sparingly given to a few of the class. Since 1872 every effort was made to increase the number, and in 1878 one hundred and thirty-eight cases were given to the In 1881 the Boston Lying-in Hospital established an Out-patient Department, and seven patients were attended. The number rapidly increased, and in 1892 the Hospital in its Out-patient Department cared for one thousand and seventy-nine All of these were attended by the students under the supervision of the Physician to Out-patients. To these must be added the cases received from the physicians of the Boston Dispensary. Prior to 1883 those students who desired to avail themselves of these clinical advantages could do so; but in that year the Faculty of the Medical School added, as one of its requirements for a degree, the rule that a student must take care of at least two cases in a satisfactory manner, handing in subsequently to the department a written clinical report of the same. The number of required cases was increased in 1886 to three, in 1888 to four, and in 1890 to six, which is the number to-day required from every candidate for a degree. only are the written clinical reports of six cases required, but one of the cases must have been conducted under the personal supervision of one of the assistants in the Obstetrical Department of the College.

The students are assigned to service in the Outpatient Department five at a time,—three at the hospital in McLean Street and two at the branch office at 17 Bennet Street. All poor women residing in the city proper or South Boston are attended in the Outpatient Department. Occasionally cases are taken in Roxbury and Charlestown, but this is only in exceptional cases. The students are, during the convalescence, assisted by two nurses, and, in case of any difficulty, are instructed to call on the House Physicians and Physicians to Out-patients.

Twenty years ago the School suffered greatly from a lack of any opportunities for giving clinical instruction in obstetrics. The few confinement cases which fell into the hands of the teachers in this department in the School were wholly inadequate to meet the want of the students, a few only being fortunate enough to obtain the privilege of the personal care The reopening of the Boston of a case of labor. Lying-in Hospital, however, was the first step which marked a great advance in the teaching of obstetrics in the Harvard Medical School. The statement of the Trustees of the Hospital made in one of their last reports shows clearly how from a small beginning the Hospital has grown to be one of the largest, if not the largest, lying-in hospital in the United States. The Boston Lying-in Hospital, which had struggled along under somewhat adverse circumstances from the date of its incorporation in 1832, was closed in 1857. The need, however, of such an institution was constantly becoming more pressing; and in 1872 efforts were made to revive its work. The house No. 24 McLean Street was purchased, and the Hospital was reopened Jan. 1, 1873, with eighteen beds. One hundred and sixty patients were received the first year. In 1877 the adjoining house was purchased, and the accommodations of the Hospital were doubled. In 1883 a bequest of \$50,000 was made to the Hospital by the late Jerome G. Kidder, and in 1887 the remaining two houses in the block of four were purchased.

The increased capacity of the Hospital soon, however, proved again insufficient to meet the existing wants and the constantly increasing demands upon it. Larger accommodations for patients, nurses, employees, and house officers became necessary, in order that the work of the institution should not be curtailed.

The Trustees believed that the time had come to meet these demands; and, regarding the present location of the Hospital an excellent one for the institution, they at the beginning of the year 1890 caused to be made plans for the alteration of the four houses on McLean Street, constituting the block already belonging to the corporation, with a view to combin-

ing them into one hospital building, with wards and reception, isolating, and operating rooms. The plans included the erection, upon the rear of the land, of adequate buildings, to be used in connection with the Hospital, for the kitchens, laundry, and servants' quarters.

The Trustees also purchased the estate No. 16 McLean Street, separated from the block of four houses by a private passage-way only, which, by making slight changes and direct connection with the main Hospital, was well adapted to supply the necessary requirements of a house for general administrative and out-patient purposes.

Before proceeding further, the desires and purposes of the Trustees were laid before the friends of the institution; and in the space of a few months a building fund of \$101,945 was generously contributed.

The plans were perfected, and the contracts for the additions and alterations were made at the end of the year 1890. The work of improvement and extension was necessarily slow, a section only of the Hospital being given up at a time, so that its regular work should not be seriously impaired. The improvements are now completed; and the corporation possesses buildings admirably adapted to the improved methods of the present, and large enough to meet the anticipated needs for many years to come.

There are three stories to the Hospital. In each are a small confinement ward and two large con-

valescing wards. A commodious amphitheatre gives excellent light for operations, and also serves as a lecture-room for the nurses in the Training School and for the medical students.

At the beginning of the year 1890 a donation of twenty thousand dollars (\$20,000) was received from Charles F. McKim, to be held and known as the "Appleton Fund," the income to be applied to the general maintenance of the Hospital so long as it shall, to a like extent as now, promote the study, practice, and knowledge of obstetrics. This liberal benefaction was accepted upon the terms indicated, with gratitude to the generous donor.

Clinical lectures are here given twice a week, which are open to the members of the fourth class. Similar lectures are also given to graduates, who thus are enabled to practically acquire a knowledge of the present antiseptic methods of conducting cases of labor and the subsequent convalescence.

The plan of giving undergraduate instruction in obstetrics during the summer months was begun in 1880 by Dr. Charles M. Green, the present Instructor in Obstetrics in the Medical School, and was continued by him for nine years as a private enterprise. In 1889, when the Medical School established its present plan of summer courses, this course was incorporated therein, and has since continued under the auspices of the School.

The opportunity for summer instruction in obstet-

rics has developed, however, from the single course given to five students in 1880 to six courses which are open to students approved by the respective instructors, and are intended to meet the wants of those who desire a more extended clinical experience than is required for the degree. There are now also offered two courses in operative obstetrics, consisting of ten exercises and demonstrations on the manikin: two courses in clinical obstetrics of one month each. consisting of bi-weekly visits in the wards of the Boston Lying-in Hospital; and two courses of two months each in didactic and clinical obstetrics. the last two courses the instruction consists of sixteen lectures on the mechanism and management of normal labor and the simpler forms of pathological labor; of a weekly conference, or quiz; and of the care of outpatients. Each student has an opportunity of conducting about twenty-five cases, which he is required to visit during convalescence and report in full to the Bedside instruction is given on all abinstructor. normal cases by the medical officers of the Hospital, and on normal cases as opportunity offers.

Class-room in Sears Laboratory, used for demonstrations and course in pathological histology.

THE PATHOLOGICAL DEPARTMENT OF THE HARVARD MEDICAL SCHOOL.

BY WILLIAM T. COUNCILMAN, M.D.,
PROFESSOR OF PATHOLOGY.

Pathology in its broadest sense may be regarded as that branch of biology which has to do with the phenomena of life under abnormal conditions. From this point of view pathology is fully as worthy of study as a science, without any regard to its especial application to medicine, as any other branch of biology. It is probable that the greatest advance in our knowledge of pathology will be derived from its study as a science. In this article we shall consider it not in this sense, but as a part of the student's medical education: and we will endeavor to define its relations to medical education and the manner in which its study can best be carried out. The Harvard Medical School was among the first, if not the first, educational institutions in this country to recognize the important place which pathology has in medical education; and, with a view of furthering its study, a special chair for pathology was founded and endowed by Dr. Shattuck. The study of pathology has always held an important place in the curriculum of medical studies in the Harvard Medical School. and will continue to do so.

The student begins the study of pathology with the second year of the course, when he has completed his study of the normal organs and their functions. Coming at this time, the course in pathology serves to bridge over the gap between what the student has learned of life under normal conditions — that is, normal anatomy and physiology - and disease as seen at the bedside. In the practice of medicine we have to do with organs in a state of disease, and the student must become familiar with the conditions present in diseased organs and the various steps which have led to their production. He must not only know in a general way what the pathological conditions are, but he must be so familiar with the diseased organs that in every case he can form a mental image of their appearance. He must be able to see before him the diseased lung that he is investigating and the diseased valve of the heart, and must know not only the gross character of the lesions, but the miscroscopic changes in the tissues. The study of pathological histology should be made, not only with the view of ascertaining the stages of the pathological processes which have led to the gross alterations seen with the naked eye, but the first changes in the cells, the primary degenerations which have been produced in consequence of abnormal conditions acting on the tissues, must be studied as well. The study of pathological histology is just as necessary for a clear conception of pathological anatomy as is the study of

normal histology for a clear conception of normal anatomy. As far as possible, comparative pathology should be studied, and the lesions in man compared with lesions in animals due to similar causes. Many pathological conditions which are found in man are more easily understood when they are compared with similar conditions in animals. We only gain our knowledge of the pathogenic action of certain bacteria by studying their action in diseases produced experimentally in animals.

With the study of the gross pathological lesions and their histogenesis there must be associated the study of the causes underlying the lesions. comprehensive knowledge is necessary to fasten and bind together the various facts which have been learned. If the student knows pathological anatomy simply as a mass of isolated facts, the knowledge will not cling to him; but he must have a general knowledge which will serve to connect one fact with an-Having studied the pathological conditions in organs, their histogenesis and causes, the student must also know what effect on the functions of an organ certain diseased conditions will have, and why. He must study the interdependence of disease; what effect the diseased condition in one organ will have in producing disease in other organs and in the body as a whole; how lesions of certain elements of an organ will affect the structure and the function of the entire organ. We should seek to deduce from our study of

pathology general laws to the operation of which diseased conditions are due; and, when this can be done, pathology will become not a mere collection of isolated facts relative to disease, but a true science. knowledge of pathological anatomy is of the greatest use to the physician in diagnosis. By the aid of physical examination he can only learn the physical condition of an organ: that it is enlarged or reduced in size: that it is indurated or contains cavities: that its surface is roughened or smooth, and that some abnormal physical condition is present. He knows that certain physical changes in the organ are found in certain diseases, that lesions of a certain character are associated with certain functional disturbances either in the organ investigated or in other organs of the body; and, by putting together all this, he makes a diagnosis of the disease,—that is, of the special abnormal condition under the action of which the lesions which he finds are produced.

The study of pathology at the Harvard Medical School is conducted by means of lectures, demonstrations, recitations, and exercises in pathological histology. The lectures are mainly devoted to general pathology. General pathology bears the same relation to pathological anatomy which physiology bears to normal anatomy. In physiology we study the functions of organs; in general pathology, the modifications of function which are produced by abnormal conditions. Briefly outlined in the lectures on gen-

eral pathology, there are considered, the primary degenerations of tissue due to the influence of pathogenic causes; the disorders of the blood and lymphatic circulation; the causes underlying them, and the effects produced in individual organs and in the body as a whole; inflammation, its causes and effects; the regenerative process and tumors; and, as far as time will allow, the special pathology of the more important organs of the body. It would be impossible to consider in a course of lectures on pathology the entire subject of ætiology. Much of this must be left to the hygienist and climatologist. No course in pathology would be complete, however, nor would it be possible for the student to thoroughly understand various diseased conditions, without some knowledge of the pathogenic organisms and their effects. limits of the lectures do not allow a full and systematic consideration of the subject. A few lectures are devoted to a general consideration of pathogenic organisms,—their classification, the various ways in which they act in the production of lesions, and the way in which their action is combated by the body. Typical infectious diseases illustrating the different ways in which pathogenic organisms act, and the classes of lesions which are produced by them, are more fully considered. We believe that the study of the relation of bacteria to disease will be much more efficiently carried out in this way, by taking up types of the various diseases and studying these types thoroughly, than by any general consideration of the subject. The diseases which have been selected as types of the different modes of action of the infectious organisms are anthrax, tuberculosis, suppuration, pneumonia, diphtheria, and malaria. The lectures in general pathology are illustrated by pathological specimens, both fresh and museum preparations; by autopsies on animals, showing the effects produced by inoculating them with different organisms; by the exhibition of cultures of the various bacteria; and by diagrams. We have considered the main object of a course of lectures on pathology to be not so much the drilling of the student in the special facts relating to disease, but a general study of disease,—the types of lesions, their causes, their mode of production, their immediate and remote effects, the process of healing, etc. The special application of this knowledge is given in the lectures on medicine and surgery.

Demonstrations are given twice a week, showing the gross lesions of organs. The appearance of the diseased organs, the character of the lesions, and the various steps in their production are studied. The diseased organs are not, as a rule, studied singly, but, as far as possible, the other organs are shown; and the endeavor is always made to show the effect on other organs of a primary change in one. The material for demonstration is derived from various hospitals and from other sources. It is to be regretted that autopsies are not more numerous. The amount of

material obtained from them is by no means sufficient for a thorough course of demonstrations. Much aid is derived from museum preparations, but it is by no means sufficient. Under the present conditions autopsies are not obtained on one-fourth of the deaths in the hospitals; and it is to be hoped that every friend of medical education and every one interested in the advance of medical science will do his utmost to improve this condition of things. Diseased organs are also frequently shown in the lectures, when cases occur which are appropriate for the demonstration of the subject of the lectures.

In the demonstrations the method is adopted of calling up the individual members of the class, having them point out the various alterations in structure which the organs present. When these have been thoroughly explained, the student carries the specimen around to the other members of the class, and demonstrates and explains to them the lesions. method appears to work admirably. Not only are the specimens more fully shown to a number of men, but they receive the explanation of them almost directly from the demonstrator. In the ordinary method which is pursued of passing a specimen around a large class, the specimen frequently reaches the student some time after the description, a number of things having been demonstrated in the mean time. Recitations are conducted in the demonstration course, and the time which remains after the demonstration of material is taken up in recitations. The latter are always made on the subjects of the lectures.

Pathological histology has heretofore been an optional study on the part of the student. With the coming year the course will probably be made obligatory, and the student will be required to pass an examination on this subject. When the course is optional with the student, he has a diminished sense of its importance; and it is believed that his study of the subject will not be so thorough, nor made with so much interest, as when he knows that it is an essential part of the course. The large size of the class renders it necessary to divide it into two sections, and with this division about forty exercises are given to each section. In the teaching of pathological histology two things will be held in mind. The course will serve not only to make the student familiar with the practical use of the microscope as an aid to diagnosis, but it is directly supplemental to the demonstrations in pathological anatomy, and enables him to more fully understand the gross lesions. The specimens which are given to the class for study are carefully selected with a view of illustrating particular lesions, and their histogenesis. The specimens will be explained at the beginning of the lesson in a short lecture, and the student will receive with the specimens a short written description of the main points to be studied. He will be required to study the sec-

tions carefully, and to make drawings. The object of drawing the specimens is to make their study more thorough. In drawing, he must keep his mind on the work: he is compelled to study the single details, and everything is made much clearer to him. It is better that the student should have a full and comprehensive idea of a single specimen studied in this way than an imperfect knowledge of a large number. general, the specimens given to the class for study are already hardened and cut in thin sections. are taken by the students, stained and mounted. struction is given in the preparation of specimens; but in the present state of histological technique, and with the large number of students, it is impossible that the various steps in the preparation of the sections can be made by the students individually. gether with these hardened specimens, which are carefully stained and mounted, considerable attention is paid to the study of fresh sections made with the freezing microtome. Such fresh sections are especially useful for illustrating degenerations in organs. Organs which have been shown at the demonstrations are especially chosen for such study, and the microscopic compared with the gross lesions.

Students are encouraged to be present at autopsies, and the manner of their conduction is explained to them. It is to be greatly regretted that the dearth of autopsies spoken of before makes it difficult to give to the student sufficient practical instruction in their conduction.

An opportunity will be given to a certain number of men who have gone through with the course in pathology to act as demonstrators the following year and to assist in teaching. Places will be assigned in the pathological laboratory to a certain number of students who have gone through with the course in pathology. Only such students will be given places who have shown themselves to be diligent and have evinced an aptitude for the work. They are encouraged to take specimens from the organs which are brought to the laboratory from the autopsies, to go through the various steps of hardening and staining the tissues, and to study them independently. Subjects will also be assigned to them for original investigation.

The pathological department is in the Sears laboratory, and the two upper stories of the building are used for this. In the third floor there is a large room which is used for demonstrations and for the course in pathological histology. The light in this room is admirable; and it is very well adapted for the purpose for which it is used, though rather small for the greatly increased number of students. In the floor below there are a number of separate rooms and a large room for special students. There is also on this floor a very good library, embracing all of the standard works on pathology and full sets of the most important journals. This library can be used by those working in this department. There are also

a number of microscopes and apparatus for general work. Students are encouraged to provide themselves with microscopes. If they should be unable to do so, microscopes will be furnished by the School at a very small annual rental; and for those engaged in special work in the laboratory there are a small number of high-class microscopes.

Physicians are encouraged and requested to send pathological specimens to the laboratory, and a large amount of valuable material is acquired in this way. Autopsies will be made at any time for physicians in the city and vicinity.

It is believed that the efficiency of the department will be greatly increased when the pathological laboratory, which is contemplated at the City Hospital, shall be built. This also will be available for students after they have completed their prescribed studies in pathology, and will be used in connection with the pathological laboratory in the School. In this laboratory pathology in its relations to clinical medicine will be more especially studied. All of the clinical microscopic examinations will be made in the laboratory under the general supervision of the pathologist of the hospital. This work will embrace the examination of blood, urine, tumors, and all manner of patho-There will be full facilities for logical products. bacteriological work, and the various pathogenic bacteria will be studied in their relation to disease. The enormous amount of material at the City Hospital, and especially in its infectious wards, offers opportunities for the study of disease which are not excelled anywhere. Especial opportunities are given for the differentiation of disease by bacteriological study. This has recently become a most important matter in the study of the various diseases of the throat. While in the hospital as internes, the student will be encouraged in the study of pathology in direct connection with clinical medicine; and the laboratory has for its especial purpose the encouragement of such study.

While the study of pathology in its relations to clinical medicine is made the special feature in the course on pathology, it is hoped that many will continue its study after graduation, and will become investigators. It is to be hoped, and even confidently expected, that facilities greater than those at present available will be provided by the liberality of those having at heart the advancement of knowledge, so that work may be done in every department of pathology. The benefits which have come to the human race from the recent advances in our knowledge of disease are incalculable. This advance has been mainly due to pathological investigations in wellendowed laboratories. We owe it to the world to contribute our work and resources to this end, and not solely enjoy the fruits of the work of others.

DIPHTHERIA AND SCARLET FEVER AT THE BOSTON CITY HOSPITAL.

BY A. L. MASON, M.D.,

ASSISTANT PROFESSOR OF CLINICAL MEDICINE, VISITING PHYSICIAN BOSTON CITY HOSPITAL.

The prospective completion of the new buildings for the treatment of diphtheria and scarlet fever, now under construction by the Trustees of the Boston City Hospital, offers the opportunity of alluding to the progress of these diseases in recent years, and to the great advantage to the community which the isolation of a larger number of dangerous cases will soon afford. The opening of these new buildings, containing two hundred and fifty beds, at a distance from the Hospital, will mark a new era in the sanitary history of Boston; and, although it is not to be hoped that the distinguished success which the Board of Health has attained in the control of small-pox and typhus will result from the isolation of a small proportion of the reported cases of diphtheria and scarlet fever, still, more of the worst cases will be treated, many lives will be saved, and a serious menace to the public health will be in part controlled. Suspected cases will be isolated. The facilities for the study and treatment of these affections will be increased:

and it is not too much to expect that improved methods, especially as applied to the early stage of diphtheria, will result in a greater proportion of recoveries.

Scarlet Fever in Boston.— The history of scarlet fever repeats itself in the periodic outbreaks such as the one we are now going through, in which not only the number of cases throughout the city shows a manifold increase over average years, but the disease also assumes a more virulent type, as shown by a higher death-rate in the Board of Health reports. Thus during the past twelve years the minimum number of cases reported was 383 in 1881, the maximum 2,938 in 1892, the death-rate varying from 4.5 to 16.6 per cent. in different years, the highest and lowest rates, however, not corresponding very closely with the years of greatest and least prevalence.

Diphtheria in Boston.— With diphtheria the history has been a different one. The first recorded deaths from this disease occurred in Boston only thirty-three years ago. Physicians were then unfamiliar with it. If it prevailed under other names in earlier days, it had become sporadic or had disappeared again. In 1859 there were but 19 deaths from this cause in Boston. The number gradually increased to 72 deaths in 1874, and in 1875 suddenly rose to 420. From this time it may be said to have become endemic, although the increase in mortality from this source has by no means corresponded with

the growth of the city or the unfavorable elements of the recent immigration. Indeed, there were but 401 deaths from diphtheria in Boston in 1890, and in 1891 only 232, the number rising again to 414 in 1892. Unlike scarlet fever, however, the ratio of deaths to reported cases is always a high one, about 30 per cent.; in some years more than one-third, never less than one-fourth, resulting fatally.

Diphtheria and Scarlet Fever at the City Hospital. About one-sixth of all reported cases of diphtheria and scarlet fever in Boston are admitted to the City Hospital, the only institution where they can be received. The result, in scarlet fever, shows no great variation from that which obtains in the city at large,—a mortality of 5 or 6 per cent. in certain years, and an increase to double that rate when grave complications prevail.

Scarlatinal Diphtheria.— In recent years, especially during the epidemic of 1892-93, a very formidable class of cases has appeared in increasing numbers; namely, those in which scarlet fever is accompanied by diphtheria. In 1890 there were 4 such cases at the Hospital; in 1891, 24; and, in 1892, 90, out of a total of 332. Of these 118 anginose cases, 51 died. They were all admitted to the scarlet fever ward, as presenting primarily the appearances of that disease.

In a previous report,* relating to the period from 1880 to 1888, the present writer stated that "a fre-

*City Hospital Reports, Fourth Series, p. 165.

quent complication was a condition which could not be distinguished clinically from diphtheria. Either at entrance or in the early days the tonsils and fauces were covered with a dirty, gray, diphtheritic membrane, often foul in odor, and accompanied by nasal discharge and glandular swelling. There were 40 such cases (out of 450). 7 were transferred to the surgical department for tracheotomy, and 5 others died. The rash in these cases had the typical appearance of scarlet fever. Post-diphtheritic paralysis developed in several instances."

Since that time there has been much discussion as to the exact status of these mixed cases; and many observers have decided, from bacteriological studies of certain collections of cases, that the faucial inflammation was not true diphtheria, but a pseudomembranous exudation, characterized by the presence of streptococci, staphylococci, and other organisms, seldom, however, by the Klebs-Loeffler bacillus of diphtheria.

But the results of bacteriological examinations and cultures at the City Hospital during the past year, for which I am indebted to Dr. F. H. Williams and Dr. Councilman, who made the experiments, show that in a certain number of these cases the Klebs-Loeffler bacillus is present. Not infrequently, too, retraction of the soft parts has been observed from obstruction of the larynx and trachea, and intubation has been necessary. Post-diphtheritic paralysis has occurred.

In short, true diphtheria has run its course coincidently with scarlatina in some of these complicated cases. Occasionally they come in groups, several from the same family, and are always isolated. The great fatality from sepsis, and the occurrence of croup, would also point to the probable presence of the bacillus diphtheriæ. The ordinary scarlatinal sore throat, the streptococcus-pseudo-diphtheria, does not produce croup by extension of the false membrane to the larynx and bronchi.

Measles and Diphtheria.—Six cases of measles presented also the clinical appearances of diphtheria, and three of them were fatal; but no cultures were made.

Diphtheria at the City Hospital.— Turning to the diphtheria department, we find always a high mortality, higher than that which prevails in the city at large, but not higher than would be expected from the bad, even hopeless, condition of many patients when admitted. They come for operation as the last resort, when the advantage of early tracheotomy or intubation has been lost. The extension of membrane to the trachea and bronchi, profound sepsis, or pneumonia, renders all efforts to save life unavailing. More than half the deaths occur within four days after admission. Of 759 cases admitted between July, 1890, and January, 1893, 352 proved fatal, or 46 per cent. 246, or nearly one-third, required operation for obstructed respiration,—a much larger propor-

tion than obtains in general practice. Of the remaining 513 cases, three-fourths recovered; and that is the usual percentage at the Hospital for a series of thirteen years in cases in which no surgical relief has been needed. Most adults are treated with success. That makes the record favorable as compared with hospitals where children only are received, and in which the death-rate is 70 per cent., sometimes 80.

For instance, Henoch, of Berlin (Charité Annalen, vol. x.), reports 208 deaths in 319 cases, 65 per cent., — a mortality of 45 per cent. in the pharyngeal cases, and nearly 90 per cent. in the croupous. 16 only survived out of 145 tracheotomies.

The statistics of Besnier show a similar result in the children's hospitals of Paris, where the mortality ranged from 54 per cent. in summer to 83 in winter. Of 919 cases admitted in the last quarter during seven years, the mortality was 71 per cent.

Roux and Yersin found the diphtheria bacillus in 61 out of 80 children in hospitals. In 19 this organism was absent, and they all got well; but one-half of those who had diphtheria died.

It is the same in all large cities, the most fatal and the most distressing to witness of all the diseases with which we have to deal.

Doubtful Cases.— A point of much interest, in view of the advances in bacteriological science, relates to the diagnosis of mild cases of diphtheria, and their differentiation from other forms of faucial inflammation which are so often sent to hospitals as diphtheria.

Besides the 759 cases mentioned above, in the same period 113 cases of non-diphtheritic tonsillitis and laryngitis were sent to the City Hospital as diphtheria. There were also 23 cases recorded as "doubtful" from a clinical point of view. In such cases, if diphtheria exists, it cannot be determined by ordinary inspection, nor can it always be positively excluded. Time usually shows. These patients were isolated as well as possible in the diphtheria ward; and none took diphtheria, so far as is known. All got well but one, a case marked as "doubtful."

The punctate spots of the follicular exudate, their localization on the tonsil while the uvula and pharynx remain free, the chills, headache, high fever, and pains in the limbs at the outset, the easy removal of the secretion by swabbing,—these and other signs often suffice to distinguish acute follicular tonsillitis from the more insidious development of diphtheria. But sometimes these appearances prove deceptive. In a day or two the membrane develops, and the bacteriological test shows the Klebs-Loeffler bacillus.

The streptococcus-pseudo-diphtheria can only be determined by culture experiment, but it is a relatively mild affection.

Therefore, the following suggestions are obvious:—

First, the necessity for bacterial culture in all doubtful cases.

Second, the desirability of isolating such cases in the interval.

During the last year or two careful bacterial examinations have been made at the Hospital by Dr. F. H. Williams, and cultures in many cases by Dr. Councilman. These researches will be published at an early day. Much time and skilled assistance are necessary to carry out this work thoroughly; but in the new buildings there will be ample facilities for the prosecution of this branch of scientific study.

It is interesting to note that these numerous patients with non-diphtheritic inflammations of the throat showed little or no tendency to contract diph-The extreme susceptitheria. Many were adults. bility, as well as the great danger to life, is limited to early childhood, under circumstances also which involve the closest proximity to the source of infection. Transmission through a third person is probably infrequent. Most nurses undergo daily extreme exposure with impunity, while the few susceptible ones sooner or later take the disease. Many acquire the utmost confidence in their immunity. Sad casualties, however, have occurred, both to House Physicians and to nurses, whose professional zeal and devotion to duty have proved stronger than their desire for self-protection. The presence in the community of a body of thoroughly trained and fearless nurses for this often terrible malady is a boon which has been appreciated by many a suffering family.

Diphtheria Treatment.— The indications for treatment are: 1. The maintenance of the strength

of the patient. 2. The destruction of the bacillus by local applications. 3. The elimination of the germ-product (tox-albumen), which pervades the system, and lingers long after the membrane has disappeared.

General Measures.— After nutriment, alcoholic stimulants, in large and frequent doses, claim the most important place in our efforts to sustain the ebbing strength. Young children may take several ounces of brandy daily with good effect. Digitalis and other cardiac stimulants have little influence. The tincture of the chloride of iron is largely used to combat the anæmia which so rapidly develops. Oxygen by inhalation, as advised by Brétonneau in 1821, has value in prolonging the struggle against asphyxia.

But, unfortunately, in many cases, vomiting, from gastric or pneumogastric irritability, makes sustenance difficult. Paralysis may prevent swallowing. The rectum soon becomes intolerant of nutritive enemata, and then the stomach tube is the only resort. If the membranes invade the larynx, early tracheotomy or intubation saves many cases in which the trachea and bronchi remain free; and a certain number of cases with croup get well without operation. Steam often relieves the breathing, temporarily at least. After profound septic poisoning has occurred, with masses of enlarged glands and brawny neck, foul nasal discharge, and, perhaps, uncontrollable hemorrhagic oozing from mouth and nose, we

can only try to promote euthanasia. Antiseptic drugs are of little or no value internally.

Many bad cases, however, and some desperate ones, are carried through by careful feeding and stimulating, good nursing, and persistent local treatment.

Local Treatment.— Since the agency of the bacillus diphtheriæ has been more fully recognized, renewed efforts have been made to find substances which will remove the exudation and destroy the underlying bacilli. Here, again, we revert to the advice of Brétonneau, who says, "Tonsillar diphtheria, by its vicinity, threatening the air-passages with imminent danger of extension, requires the most expeditious and complete local treatment." Nitrate of silver was his favorite remedy, and in enormous quantities. But there are obvious objections to the use of nitrate of silver and the strong mineral acids which do not apply to some of the milder agents.

Here it must be borne in mind, with regard to persistent local treatment in general, that the strength of the child is to be carefully considered, and the extent to which the process has gone,—whether the pain and exhaustion of frequent topical applications to the throat and nose of a frightened and struggling patient are not more harmful than any benefit to be derived therefrom. Routine treatment may be very bad. In some cases, one or two applications a day, and those in a recumbent position, may be all that

can be safely attempted. In others, the discipline of the gag may be salutary.

Touching the tonsils two or three times with chromic acid, at an early stage, may suffice to remove the deposit; and a spray of corrosive sublimate, I to 10,000, is destructive to superficial germs. Loeffler's culture experiments showed, however, that a strength of I to 1,000 for twenty seconds was necessary to kill the deeper bacilli in the media employed. Even the weaker solution, I to 10,000, cannot be used with impunity in young children.

Carbolic acid, 5 per cent., combined with alcohol, sterilizes, but may also be toxic.

Chlorine water and chloride of lime in strong solution are active disinfectants. The former substance, injected beneath the membrane by means of a syringe devised for the purpose, was thought by Dr. A. Seibert to be the strongest safe remedy, the solution thus reaching the active bacilli in the deeper tissues. This author thinks that the superficial exudate is of little importance and inert (Archives of Pediatrics, 1891).

This is open to question, however; and the decomposing membrane can in many cases be readily cleared away by the peroxide of hydrogen. The action of this agent, if of sufficient strength, is very striking, the exudate disappearing at once in an effervescent froth, and leaving the surface free for the action of other germicides, of which corrosive sub-

limate must be regarded as the most powerful, and, if not too frequently applied, comparatively safe.

Hydrogen peroxide in 50-volume solution has been used at the City Hospital by Dr. F. H. Williams, as described in his paper published last year. It rapidly clears the throat of membranes and of odor, and has no harmful effect upon the sound tissues. Neither is it poisonous. Frequent spraying with the 10-volume solution often suffices to keep the diseased surfaces clean, to prevent the spread of the membranes, and to check glandular swelling and sepsis. It may be used with care in the nose. The pain of all local applications should be mitigated by cocaine.

Loeffler found salicylic acid, permanganate of potash, chlorate of potash, resorcin, iodine, and many other substances relatively poor germicides, except the very strong solutions of some of them.

Nasal Diphtheria.—Primary nasal diphtheria is probably more common than is supposed and a not infrequent source of unsuspected danger. The secondary involvement of the naso-pharynx in ordinary cases adds greatly to the danger of sepsis through the lymphatics. But caution is required in the employment of the nasal douche, syringe, or atomizer, which the impervious passages render very painful. Acute inflammation of the middle ear with bloody discharge is a common result when the fluids are forced through the Eustachian tube. Therefore, it is very difficult to disinfect the nose in young children; and

the gentle introduction of warm, mild, saline solutions and vaporized spray is best tolerated.

Nervous System. - Not to dwell at length upon the dangers from cardiac and respiratory paralysis, a rapid pulse during convalescence must always be regarded as a warning that recumbency is essential. Irregularity in the beat, pallor, or vomiting, may be the forerunner of collapse from pneumogastric neuritis. Absence of knee-jerk may develop very early or not until late in convalescence; and the knee-jerk may be normal throughout, even with paralysis of accommodation and of the soft palate, slight Muscular paresis often goes unobserved. in degree. Strychnine is the best remedy, by the mouth or subcutaneously; and with children it is a good plan to administer tincture of nux vomica, one to five drops, three times daily, from the beginning of the illness.

French and German observations as to the nature of the subtle virus of diphtheria show that sterilized cultures from the membrane yield a soluble substance, probably a tox-albumen, which kills animals.

Slow Recovery.— As the Klebs-Loeffler bacillus is found in the throat and nose some time after the disappearance of the membranes, this accounts for their occasional recurrence after several days. Disinfecting sprays and gargles should not be too soon abandoned; and the patient should be isolated for a sufficient length of time to insure the safety of others, seldom less than one month. The elimination of the

poison may be very slow, and should be aided by mild salines and diuretics, baths to promote free action of the skin, tonics, and gentle exercise in the fresh air. Mental and nervous depression may persist for many months.

THE TEACHING OF MATERIA MEDICA AND THERAPEUTICS.

BY CHARLES HARRINGTON, M.D.,
INSTRUCTOR IN MATERIA MEDICA AND HYGIENE IN THE
HARVARD MEDICAL SCHOOL.

At what stage of a student's medical training the teaching of Materia Medica and Therapeutics should be begun, and what method is the correct one for their proper presentation, are questions upon which there is and must be some difference of opinion. some it is held that they should be a part of a student's earlier work and in a sense preparatory; by others that they should come toward the end of the medical course, when the student is more conversant with disease; and by others that they should be separated, and be taught in different years. By some it is maintained that Therapeutics should be taught in its entirety by a single instructor, who should be a general practitioner of large experience in caring for the sick; by others it is considered better that this subject should be divided among several instructors, who shall receive the students in different courses and in different stages of development. Whatever is the proper time for beginning the study of Therapeutics is the right one for beginning also the study of

Materia Medica, for the two subjects ought not to be separated. Materia Medica by itself is a most dry and uninteresting subject, which offers almost no attractions and is for the most part a mere matter of memory. He is surely a most exceptional student who can be even mildly enthusiastic over the study of the physical and chemical properties of remedial agents, the composition of pharmacopæal preparations, the memorizing of doses, and the writing of prescriptions, with nothing as to physiological action or application to the treatment of disease. student of pharmacy the subject is of interest; to the student of medicine it is only a bugbear. bine the study of properties, preparations, prescriptions, and doses, with physiological action, and much of the burden is removed.

But what is the proper time for beginning the study of these subjects? Shall the student begin it early in the course or late? In arranging the new four years' course of study at the Harvard Medical School, it has been decided that he shall take up the two subjects, Materia Medica and Therapeutics, in the beginning of his second year. At that time he is already familiar with anatomy, physiology, and chemistry, but knows nothing of disease. For the proper understanding of the action of remedial agents he has the necessary preliminary training. It is not necessary for such understanding that he should be conversant with disease: the practical application of

remedies to treatment of pathological conditions is a matter which belongs to a later stage of his work. The intelligent application of remedies presupposes a more or less thorough knowledge of action on the normal system. At the present time, the determination of what beneficial action will be exerted on a pathological condition by a new remedy is not a matter of blind hit-or-miss experiment, but of careful physiological study, made first with animals in a normal condition, then with man. From the results obtained by such experiments the clinician may draw his conclusions, and make application to pathological conditions. For the obtaining of these first results a knowledge of physiology is essential, a familiarity with disease is by no means necessary. And in the same way a student who has passed in physiology is fitted to study and understand the action of remedies, even though he be quite ignorant of disease. After mastering the physiological actions of the various remedies so far as they may be understood, his mind is in proper condition for the further instruction in their practical uses. There are, it is true, many drugs whose mode of action, when they are given in therapeutic doses, is not understood at all; but this fact will not, of course, stand in the way of a proper understanding of what experience has taught as to their value in the treatment of disease.

The old-fashioned method of teaching Materia Medica and Therapeutics is, or ought to be, a thing of the past. In the best continental schools these subjects are taught in a manner quite unlike that to which we in this country have been accustomed. Their teachers are not necessarily men of large medical practice. Indeed, the best of them are not practitioners at all. Their time is engaged in the study of the action of drugs and other remedial agents, and this, with necessarily more or less of their application to disease, they teach to their students, leaving by far the greatest part of the practical side to the different clinical teachers.

It must be borne in mind that Therapeutics is a very rapidly growing subject. During the past decade the advances in chemistry and the growing interest in pharmacological research have added and are constantly adding to our Materia Medica many new and important drugs, and what we now see is but a beginning.

A new compound discovered to-day is forthwith put to the test of physiological experiment, and its value or lack of it soon ascertained. Interest in pharmacology will no longer allow a valuable remedy to remain uninvestigated for many years, as in the past. Chloral, for example, discovered by Liebig in 1832, was not known as a valuable drug until Liebreich, reasoning from its reaction in contact with an alkali, was led to make his investigations, the results of which were given to the world in 1869. Had it been discovered only a year ago, it would have been al-

ready extensively investigated, both physiologically and clinically.

Therapeutics, in its broadest sense, has become a subject which, like chemistry, must be divided into different departments and among different instructors. No one can maintain that the whole subject of chemistry should be or can be taught by any one The worker in some special line in chemistry is better fitted for instructing in that branch than is another who devotes his entire attention to another subject, either nearly or remotely related, while the main ground-work is best taught by the general chemist. So in medicine the specialist, devoting his entire attention to a limited number of pathological conditions, becomes necessarily better qualified to suggest proper therapeutic treatment of those conditions than the general practitioner, while in general medicine the latter will in very many ways be the superior. But the practitioner of wide experience in general medicine, who may be eminently qualified for the proper teaching of treatment, can hardly find time and may lack inclination to go with any great thoroughness into the study and teaching of the details of physiological action, and the greater his practice, the less able will he be to afford the time necessary for such work. On the other hand, he who can devote himself to this work without giving time to the practice of medicine in any of its branches, may be of use both to the clinical teacher and to the student, by preparing the latter to understand why and in what manner the line of treatment suggested may be proper in its application and successful in its results.

To-day in our School the subject Materia Medica and Therapeutics is taught in the following man-In the first place, the attempt is made to divest the subject as much as possible of those features which go so far to make its study a burden. Everybody conversant with the subject will admit that there is much connected with it which is a mere matter of memory, and to the practitioner of medicine serves no useful purpose and is soon to be forgotten. Due consideration is paid to the fact that after graduation the student has not to personally obtain from the animal, mineral, and vegetable worlds the remedies which he is to apply to the treatment of disease, has not to apply chemical tests to assure himself of their purity and strength, and has not to act as his own apothecary.

Each remedial agent is considered separately. The student is informed of the source, nature, and chemical and physical properties of each drug, its active principle, if any, and the main facts regarding the latter, the forms in which the drug may be exhibited, the composition of the compounds into which it enters, the doses, and the methods of administration. He is not expected to burden his memory with its geographical distribution, all the requirements of the

United States Pharmacopæia as to purity and preparation, the exact amounts of solvents required for solution, the exact proportions of compound preparations, precise botanical descriptions of plants from which it may be derived, or the exact crystalline form, if any, in which it occurs. The drugs and their various preparations are shown. He is then instructed in the mode of action of each drug on the system, what precautions are necessary in its use, the contra-indications for its employment, incompatibilities, and in a general way in what diseases it is employed and for what purpose. He is also instructed how to write proper prescriptions.

Practice is touched upon in the preliminary course only to such an extent as is necessary to fix certain facts in his mind. The practical application of remedies is taught by those best fitted for such work, namely, the instructors in general medicine and in the various specialties, and with these the student comes in contact most largely in his third and fourth years.

In addition to this instruction it is intended that a course in experimental pharmacology shall be established under the charge of an instructor of experience in this line of investigation, which will doubtless attract men having inclination and special aptitude for such work.

CORRECTION.

The President wishes to correct an erroneous statement made by him at the last annual meeting, and printed in Bulletin 3, p. 30: "Our school will by this act have the credit of inaugurating in this country...a graded four years' course." He was not aware at the time that the Medical Department of Michigan University instituted such a course of instruction in 1890.

BULLETIN

OF THE

HARVARD MEDICAL ALUMNI ASSOCIATION

NUMBER 5

Report of the Third Annual Meeting held in Boston June 27, 1893



Boston: Published by the Association 1893

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CONTENTS.

		PAGE
Officers of the Harvard Medical Alumni Associati	ON	5
Constitution		9
REPORT OF THE THIRD ANNUAL BUSINESS MEETING		15
ACCOUNT OF THE THIRD ANNUAL DINNER		25
List of Deaths		81
Extract from the Report of the Dean of the Me	DI-	
CAL SCHOOL		85

OFFICERS

OF THE

HARVARD MEDICAL ALUMNI ASSOCIATION.

President.

1871. JAMES READ CHADWICK, . 270 Clarendon St., Boston, Mass.

Dice-Presidents.

	Dittalitan	JEILLD.
1878.	CHARLES PARKER BANCROFT,	Concord, N.H.
1856.	CHARLES EDWARD BRIGGS,	2747 Olive St., St. Louis, Mo.
1861.	ROBERT THAXTER EDES,	Adams Nervine Asylum, Jam. Plain.
1860.	JAMES MILTON FLINT,	Navy Dep't, Washington, D.C.
18 6 9.	WILLIAM ABRAHAM HASKELL, .	Alton, Ill.
1865.	Amos Howe Johnson,	26 Winter St., Salem, Mass.
1865.	George Herman Powers,	533 Sutter St., San Francisco, Cal.
1867.	FREDERICK RUSSELL STURGIS, .	16 W. 32d St., New York City.
1868.	VERNON OTIS TAYLOR,	Box 1459, Providence, R.I.
1868.	JOHN ORDWAY WEBSTER,	8364 F. St., San Diego, Cal.
	Treasur	et.
-9	WALTED ELA	62 Brattle St. Cambridge Mass

1875. WALTER ELA, 62 Brattle St., Cambridge, Mass.

Becretary.

1888. Augustus Thorndike, 101 Beacon St., Boston, Mass.

Councillors.

FOR THE TERM ENDING IN 1897.

- 1876. ARTHUR TRACY CABOT, 3 Marlboro St., Boston, Mass. 1866. JAMES FOSTER ALLEYNE ADAMS, . 26 Wendell Ave., Pittsfield, Mass.
- 1886. ALGERNON COOLIDGE, JR., . . . I Exeter St., Boston, Mass.

6 HARVARD MEDICAL ALUMNI ASSOCIATION.

FOR THE TERM ENDING IN 1896.

- 1867. CHARLES GREENLEAF CARLETON, 301 Essex St., Lawrence, Mass.
- 1861. FRANCIS HENRY BROWN, . . . 75 Westland Ave., Boston, Mass.
- 1864. SAMUEL WOOD LANGMAID, . . 373 Boylston St., Boston, Mass.

FOR THE TERM ENDING IN 1895.

- 1870. CHARLES FOLLEN FOLSOM, . . . 15 Marlboro St., Boston, Mass.
- 1863. GEORGE EBENEZER FRANCIS, . . 79 Elm St., Worcester, Mass.
- 1854. LINCOLN RIPLEY STONE, . . . Newton, Mass.

FOR THE TERM ENDING IN 1894.

- 1874. WILLIAM STURGIS BIGELOW. . . 60 Beacon St., Boston, Mass.
- 1865. SILAS DEAN PRESBREY, . . Taunton, Mass.
- 1864. FRANCIS MINOT WELD, . . . Storey Pl., Jamaica Plain, Mass.

CONSTITUTION

CONSTITUTION OF THE HARVARD MEDICAL ALUMNI ASSOCIATION.

ARTICLE I.

The name of this Association shall be the "Harvard Medical Alumni Association."

ARTICLE II.

The objects of this Association shall be to advance the cause of medical education, to promote the interests and increase the usefulness of the Harvard Medical School, and to promote acquaintance and good-fellowship among the members of the Association.

ARTICLE III.

SECTION 1. All graduates of the Harvard Medical School are eligible to be and may become members, if approved by the Council.

SECT. 2. By recommendation of the Council and by a two-thirds vote of the Society at any regular meeting, any member may be dropped.

SECT. 3. Every member shall pay an initiation fee of one dollar, and an annual due thereafter of one dollar; but any member may become a life member by the payment of twenty dollars in one payment, after which he shall be relieved from the payment of all dues.

SECT. 4. All physicians who have received any honorary degree from Harvard University shall be *ipso facto* honorary members of the Association. Honorary members may also be elected by this Association on nomination by the Council.

ARTICLE IV.

The officers of the Association shall be a President, ten Vice-Presidents, a Secretary, a Treasurer, and a Council of fifteen

members. The President, Secretary, and Treasurer shall be exofficio members of the Council.

ARTICLE V.

SECTION 1. The President, Vice-Presidents, Secretary, and Treasurer shall be elected for the term of three years.

SECT. 2. The members of the Council, not members ex officio, shall be elected in classes as follows: at the first meeting of the Association, three members of the Council shall be elected for the term of four years, three members for the term of three years, three members for the term of one year; and thereafter, at the annual meeting of the Association in each year, three members shall be elected for the full term of four years, to fill the places of those whose term of office shall then have expired.

SECT. 3. Vacancies occurring in any of the offices before the expiration of the respective terms shall be filled at the annual meeting next following the occurrence of such vacancies. The Council shall have the power to fill a vacancy in the offices of Secretary or Treasurer for the remainder of the current year.

SECT. 4. All officers of the Association shall hold their respective offices during the regular term thereof, and until their successors shall be elected and qualified.

ARTICLE VI.

The annual meeting of the Association shall be held at Boston, Massachusetts, on the Tuesday preceding the annual Commencement of Harvard College; provided, however, that the Council shall have the power to appoint in any year a different time and place for the annual meeting, if deemed expedient.

ARTICLE VII.

The President or the Council shall have the power to call a special meeting of the Association at any time, provided that at least two weeks' previous notice be given to all members of the Association.

ARTICLE VIII.

SECTION 1. The executive power of the Association shall be vested in the Council, subject to the control and direction of the Association.

SECT. 2. The Council shall have the power to elect from its own members an Executive Committee of not less than three members, to whom may be delegated such powers as the Council shall deem expedient.

SECT. 3. The Council shall elect every year from its own members a "Committee on the Harvard Medical School," and may elect such other committees from its own members or the Association at large as it shall, from time to time, deem expedient to carry out the objects of the Association.

SECT. 4. The Council shall have the power to appoint, from time to time, one or more Corresponding Secretaries in the different cities or towns of the United States and the British North American provinces. It shall be the duty and office of such Corresponding Secretaries to promote in their respective localities the objects and interests of the Association.

SECT. 5. The Council shall have the power to fix the number of members of the Association necessary to constitute a quorum for the transaction of any and all business save that of amending the Constitution, and to fix also the number of their own members necessary to constitute a quorum of the Council.

ARTICLE IX.

The Secretary, Treasurer, the Council, and the Committee on the Harvard Medical School shall make and submit to the Association, at its annual meeting in each year, reports in writing or print of their respective doings for the preceding year.

ARTICLE X.

This Constitution may be amended by a majority vote of all the members of the Association present at the annual meeting, or at any special meeting called for that purpose, notice of such amendment having been given in the call for the meeting.

ANNUAL MEETING

ANNUAL MEETING.

The annual meeting of the Harvard Medical Alumni Association was held at the Harvard Medical School, Boston, on Tuesday, June 27, 1893, at twelve o'clock, the President in the chair. There were present about sixty members. The Secretary read abstracts of the records, giving an account of the meetings of the Council, and of the Executive Committee, as follows:

SECRETARY'S REPORT.

Since the annual meeting of the Association, held a year ago, there have been two meetings of the Council and two of the Executive Committee.

At the first meeting of the Council, held Feb. 10, 1893, it was determined to publish a Bulletin containing an account of the newer methods of teaching at the Medical School. An edition of the Bulletin was published early in May, of three thousand copies. Half of these were sent by the Faculty of the School, and fifteen hundred by the Association. They were sent to the graduates of the School, whether or not members of the Association; and, as usual, the Bulletin was sent to foreign and American medical libraries and to all Harvard clubs and persons interested in medical education.

The Council at this meeting also authorized the President to invite Dr. H. C. Wood, of Philadelphia, to deliver five lectures upon Therapeutics, which have been delivered at the School, and been attended by very large audiences. The expenses of the Bulletin and lectures have slightly exceeded the \$650 appropriated by the Council for this purpose. The Bulletin was published under

a joint committee from the Association and from the Faculty of the School, consisting of Drs. Warren, Fitz, Chadwick, and Lovett.

At a meeting of the Executive Committee held in March a committee to report on the Harvard Medical School was elected, consisting of Drs. Stone, Langmaid, and Bigelow.

A meeting of the Council was held on June 9, 1893. A Nominating Committee of five was elected to prepare nominations for the present annual meeting. The committee consisted of Drs. Chadwick, A. H. Johnson of Salem, E. H. Bradford, L. F. Woodward of Worcester, and R. W. Lovett. It was voted that, as last year, the committee be directed to offer two names for each vacancy, and that the voting at the annual meeting should be by the Australian ballot system, with printed ballots.

The resignation of the Secretary, to take effect July 1, 1893, was read and accepted.

Dr. F. K. Paddock, of Pittsfield, and Professor W. H. Howell, of the Harvard Medical School, were nominated for honorary membership in the Association.

It was moved that a Bulletin be published after the annual meeting, containing an account of the proceedings of the meeting and the speeches at the dinner, and that this Bulletin be sent to all members of the Association and to the usual list of libraries and journals.

The present membership of the Association on June 27, 1893, is 1,107,—a net gain of 107 over the number since the Catalogue was issued. There are at present 14 honorary members. Twenty-five members have died since the Catalogue was issued.

R. W. LOVETT, Secretary.

The report was adopted.

The PRESIDENT.—Before asking the Treasurer to present his report, as the election of officers takes some little time, I will ask the Secretary to hand round the ballots. The annual election of three Councillors to fill the places of those who retire after their three years of service is required. You will find on the ballots six names, and you will put a cross against those for whom you

wish to vote. You will vote for three. The Secretary, to our regret, has presented his resignation; and you are therefore called upon to elect a new Secretary. Although this is the third annual meeting at which the present officers have held office, you will remember that, by special vote at the preliminary meeting, it was voted that the election of officers then to be held should be considered as the election of the first annual meeting. Consequently, it is our misfortune to have to serve one year more. The Secretary will pass round the ballots. I will ask Dr. Greenleaf and Dr. Forster to collect the ballots. While this is going on, I will ask the Treasurer to present his report.

Dr. Ela, the Treasurer, reported as follows while the ballot was proceeding:—

The third report of the Treasurer of the Harvard Medical School Association for 1893 is respectfully submitted.

TREASURER'S REPORT.

The Association, organized April 30, 1891, now numbers over 1,100 members, representing thirty-six States and Territories of the United States, the Dominion of Canada, and six foreign countries; and they are distributed as follows:—

Arizona,	_			_	•	2	Michigan,		_	9
						_				
California, .						25	•			
Colorado, .			•		•	6	Missouri,	•	•	8
Connecticut,						18	Montana,			3
District of Colu	m	bia,	,			3	New Hampshire,			33
Florida,						1	New Jersey,			3
Georgia, 🐧 .						Ţ	New York,			60
Illinois,						14	North Carolina,			1
Indiana,						2	Ohio,			4
Iowa,						3	Oregon,			3
Kansas,						3	Pennsylvania, .			
Kentucky, .						2	Rhode Island, .			
Maine,						19				
						4	Tennessee,			
Massachusetts,							Carried forw			

Brought forward 1,04	o Chili,
Texas,	Germany,
Utah,	Mexico,
Vermont,	$\frac{1}{6}$ Newfoundland,
Virginia,	Republic of Columbia,
Washington,	4 1,088
West Virginia,	2 Honorary Members,—
Wisconsin,	5 Massachusetts, 11
New Brunswick,	5 District of Columbia, 1
Nova Scotia,	4 Pennsylvania 1
Prince Edward Island,	2 Colorado, 1 14
Australia,	I I,102

The membership roll comprises the names of more than one-half of the whole number of the graduates of the Harvard Medical School known to be living.

Since the Association was organized, there have been thirty-

During the past year one hundred and seven have joined the Association.

Twenty-nine members are enrolled as life members, an increase of seventeen since April, 1892; and it is hoped that during the present year the number of life members may be largely increased. The Life Membership Fund, which amounts to \$600, is deposited in the Cambridge Savings Bank as a special deposit, and draws interest at four per cent. per annum; and the interest only will be considered current revenue.

The annual due for 1893 is now payable, and the Treasurer renews his request for a prompt remittance of annual dues.

WALTER ELA, Trasurer, IN ACCOUNT WITH HARVARD MEDICAL SCHOOL ASSOCIATION, June 15, 1892, to June 15, 1893.

\$3,039.30	Constitution of the state of th	\$3,039.30	
1.304.48			
	ings Bank, 279.56		
	On deposit General Fund, Cambridge Sav-		
	bridge Savings Bank, \$600.00		
	On deposit Life Membership Fund, Cam-		
4 2.55	Sundry bills, Voucher 10,		
14.36	Stationery bills, Voucher 9,		
93.05	Postage, Voucher 8,	346.00	Sale of tickets to annual dinner, June 28, 1892,
55.65	Printing bills, Voucher 7,		Excess and exchange,
22.80	Excess in cost of above over appropriation,	26.00	26 receipts (no names of senders nor clew to same),
650.00	Voucher 6,	1.00	I annual due for 1895,
	and publishing 1,500 copies of Bulletin No. 4,		3 annual dues for 1894,
	Appropriation for Dr. H. C. Wood's lectures	637.00	637 annual dues for 1893,
291.62	Publishing 1,500 copies Bulletin No. 3, Voucher 5, .	492.00	492 annual dues for 1892,
S1.99	Voucher 4,	36.00	36 annual dues for 1891,
	Clerk hire for Secretary and selling dinner tickets,	114.00	114 initiation fees,
22.80	Stenographer and typewriting, Voucher 3,	60.00	3 life membership fees
50.00	Voucher 2,	43-43	Interest \ Old Colony Trust Company, . 3.97
	Design for bill of fare and 300 copies of same,		Cambridge Savings Bank, \$39.46
\$440.00	By annual dinner, June 28, 1892, Voucher 1,	\$1,279.94	To Balance on hand June 15, 1892,
	Cr.		Dr.

The undersigned, a duly appointed committee to audit the Treasurer's accounts, certify that they have inspected the said accounts, and that they find them properly vouched and correctly cast. They have also examined the evidences of the Association's funds, and find them to represent \$1,304.48, being the balance to the new account.

F. W. DRAPER.

BOSTON, June 23, 1893.

The report was adopted.

The President.—The next business is a change in Article 1 of the Constitution, of which, according to the Constitution, a notice was put in the programme for this meeting. It was to the effect that Article 1 read:—

The name of this Association shall be the Harvard Medical Alumni Association.

Dr. Forster.— Mr. President, I would move that we adopt the change in the Constitution, changing the name from the Harvard Medical School Association to the Harvard Medical Alumni Association.

The motion was seconded.

Dr. Forster.— I would say simply that the name as newly proposed shows what we are, that we are an alumni association. The old name merely shows that some time in our existence we were connected with the School. The difference between our Association and the Law School Association is that we admit only graduates, and therefore we should have the name of "Alumni." The Law School Association takes any member who has been an attendant at the Law School for one year. That is all, Mr. President.

Dr. Brennan.—I should like to say, Mr. President, that the only other association of the kind that I know has a similar title in New York. It calls itself the Association of Alumni of the College of Physicians and Surgeons.

Dr. Broughton.—If we observe the fitness of things, this name, Alumni Association, seems more exactly to define the Association. As Dr. Forster has said, there is nothing in the present name, Harvard Medical School Association, which really defines what we are. It might be that non-graduates and undergraduates were included in this name, whereas the Medical Alumni Association defines exactly. I therefore think it should be adopted.

The motion to amend the Constitution as stated was adopted.

Dr. Forster reported the result of the ballot, which was as follows:—

Whole number of votes,														
Necessary for a choice,	•	•	•	•	•	•	•	•	•	•	•	•	•	31
	FOR	C	וטכ	1CI	LLC	RS								
Arthur T. Cabot, M.D. 1	876)										В	osto	n
J. F. A. Adams, M.D. 18														
Algernon Coolidge, Jr., 1	M.D). 1	88	6	•	•	•		•	•	•	В	osto	n
FOR SECRETARY.														
Augustus Thorndike, M.	D.	18	88		•		•	•	•			В	osto	n
On motion of D			•	F	or	ste	r,	th	e	me	eet	in	g v	vas

then adjourned.

NOTE. - By an oversight the election of Honorary Fellows was omitted.

THE ANNUAL DINNER

THE ANNUAL DINNER.

The Annual Dinner of the Association was served at the Hotel Vendome at I P.M. One hundred and sixty-eight members were present. Dr. J. R. Chadwick presided, and opened the after-dinner proceedings with the following address:—

THE PRESIDENT'S ADDRESS.

Fellow-Alumni of the Harvard Medical School,— I welcome you for the third time to this festive board, from which the juice of the grape is banished in deference to the dictum of Galen, who forbade physicians to drink wine lest they "stink like goats."

We have no need of artificial stimulants, for we meet in jubilation over the triumphant success which has greeted the inauguration of an obligatory four years' course of study in the Harvard Medical School a year ago. You will remember the doubts we all felt last year as to the difficulties and pecuniary sacrifices that were to be anticipated from the reduced number of students that it was predicted would attend the institution of a four years' course in place of the former three years' course. In the changes intro-

duced in 1870-71, advancing the requirements of the School, the number of students was reduced 40 per cent. A similar reduction in the number of the class entering the four years' curriculum was predicted. Our guest of last year, the Provost of the University of Pennsylvania, said he regarded a change to a four years' course "with much more apprehension" than he regarded the change to a three years' course. believed it was "going to test the resources of the medical schools more severely." How brilliantly do the facts refute these evil forebodings! The class that entered the Medical School, only three months after our last meeting, was the largest that ever was enrolled in the School, one hundred and seventy-four students as contrasted with one hundred and sixtynine who entered the previous year to take only a three years' course, a class then regarded as phenomenally large. The total number of students in the School during the past year was four hundred and forty-two, as contrasted with three hundred and ninetynine in the year 1891-92. As every student without exception pays \$200 a year for his tuition, you can readily estimate the resources of the School from this source only. This gratifying increase in students, and consequently of income, does not, however, solve the whole problem; for, as Dr. Pepper very justly pointed out, the added year of study must mean chiefly increased clinical opportunities. These are difficult to supply without a hospital under the absolute control of the Faculty. That some friend or friends of the Medical School will endow such an institution must be the aim of our hopes and efforts. Let the benevolent remember that, when Paula in the fourth century built a hospital, she conferred, as Gibbon says, a greater blessing on humanity by so doing than by condemning her daughter to perpetual chastity, although she was for this act honored by Saint Jerome with the title of mother-in-law of God.

While not abating one jot from their belief in the injustice done the graduates of the professional schools of the University in not granting to them the right of suffrage in the election of Overseers, it was not thought expedient by the officers of this Association to present a petition to the Governing Board this year. The Law School Association, however, and the President of the Lawrence Scientific School Association, renewed their appeal, and again obtained the subjoined favorable report from the majority of a committee of the Board of Overseers, Messrs. Bonaparte and Lyman, while George O. Shattuck, Esq., dissented.

REPORT ON VOTING FOR OVERSEERS BY GRADU-ATES OF PROFESSIONAL SCHOOLS.

To the Board of Overseers of Harvard College:

On Nov. 16, 1892, the following vote, having been received from the President and Fellows of Harvard College, was referred by the Board of Overseers to Messrs. Bonaparte, G. O. Shattuck, and Lyman (the undersigned), as a Special Committee:—

At a meeting of the President and Fellows of Harvard College in Boston, Nov. 14, 1892, Voted, To send to the Board of Overseers a communication received from the Harvard Law School Association, as follows:—

BOSTON, Nov. 4, 1892.

To the President and Fellows of Harvard College:

The Harvard Law School Association, in pursuance of a vote passed at its seventh annual meeting, held on June 28, 1892, respectfully petitions that such action be taken as may be necessary to secure to graduates of the Law School the right to vote for members of the Board of Overseers, on the same terms and under the same restrictions as are now attached to its exercise by Bachelors of Arts.

(Signed)

Louis D. Brandeis, Secretary.

A true copy of record.

Attest:

E. W. HOOPER, Secretary.

On Jan. 11, 1893, the following vote, also received from the President and Fellows, was likewise referred to the same Committee:—

At a meeting of the President and Fellows of Harvard College in Boston, Nov. 28, 1892, Voted, To send to the Board of Overseers, a communication received from the alumni of the Lawrence Scientific School, as follows:—

CAMBRIDGE, Nov. 16, 1892.

To the President and Fellows of Harvard College:

GENTLEMEN,—In behalf of the alumni of the Lawrence Scientific School, I beg to submit my petition that the graduates of that School be granted the suffrage for members of the Board of Overseers.

I beg that this right be extended to all those who have graduated from the School since its foundation.

Very respectfully yours,

(Signed)

N. S. SHALER,

President of the Alumni L. S. S.

A true copy of record.

Attest:

E. W. HOOPER, Secretary.

A desire having been expressed by certain among those interested in the petitions thus received to be heard before the Committee made its report, a public hearing was appointed for January 25, and held in the rooms of the Corporation. On this occasion representatives of the alumni of the Law, Medical, and Scientific Schools were heard in support of the petitions; and a gentleman who attended by request of the Chairman of the Committee was heard in opposition. The arguments then advanced on either side, as well as others which have become familiar through frequent discussions of the subject, have been duly weighed by the Committee. They now submit their conclusions for the consideration of the Board.

The proposed change in the law regulating the qualifications of electors for the Board of Overseers has been suggested in slightly varying forms during several successive years; and it may be safely said that its importance, whether for good or ill, is now recognized as less than when it was first submitted. At the hearing it was conceded by both sides that, if the suffrage were extended as desired by the petitioners, the personnel of the Board of Overseers would not be materially changed either for the better or the worse. It was also admitted that exclusion from the suffrage involved no practical hardship for alumni of the several graduate departments of the University, beyond what they claimed to be an arbitrary discrimination against their degrees. No one disputes that the right of voting for Overseers is conferred, not for the benefit of the electors, but for that of the University; and no question of natural or legal right arises in connection with this privilege. The advocates of an extended suffrage urge that the same reasons which led the selection of Overseers to be intrusted to those holding an A.B. degree now apply with equal force (whatever may have been the case when the present law was enacted) to alumni of the several graduate departments; and, if this be true, the Committee think that they have proved their case. For, while there may be no special advantage in merely increasing the number of electors, to allow the holder of one degree to vote and debar the holder of another degree from the same privilege, if no substantial reason exists for the discrimination, would be to make a distinction without a difference. The view of the Committee may be illustrated by supposing that a residence qualification had been imposed by the legislature of 1865. Had the suffrage been restricted to residents of the Commonwealth which created the Corporation, the propriety of this limitation might be doubted on grounds of expediency; but non-residents of Massachusetts could have hardly deemed themselves aggrieved. If, however, it had been extended to residents of Rhode Island and yet denied to residents of Connecticut, the last-named class of alumni would have had just cause to complain. If no reason exists why a graduate of the Law School, or the Medical School, or the Divinity School, or the Lawrence Scientific School, should not vote, which does not apply as well to one holding an A.B. degree, the Committee think that the suffrage should be extended as prayed. It consequently becomes the Committee's duty to consider what reasons have been from time to time urged against this extension.

It is feared by some that alumni of the professional schools, if graduates of another college, might subordinate the interests of Harvard to those of a rival, and, if graduates of no college, might be unfit to share in the government of a college. Neither of these apprehensions appears to the Committee reasonable. The first is evidently based upon a perhaps unconscious assumption that each of the various seats of learning in the country is a natural enemy to all the others; that true friends of Harvard will always look with an evil eye on the prosperity of Yale or Princeton or Cornell. seems to the Committee that this view requires no refutation. They see nothing incongruous, nothing necessarily or even probably harmful, in the same person participating in the choice of governing bodies at two or several Universities. On the contrary, they think that the wider experience he would thus gain might enable him to more intelligently promote the best interests of each.

It is possible that, when the duty of electing the Overseers was first imposed on alumni of the College, some among those of the professional schools who held no other degree than what they there obtained could not be justly termed or treated as liberally educated men. We need not, however, determine whether or how far this may then have been true. To-day it is quite safe to say that a Bachelor of Medicine, Law, Science, or Divinity at Harvard has completed a course of study as serious, and given proof of as much application, as a Bachelor of Arts. If any doubt this, they fail to realize what have been the changes of the past thirty years in these departments of the University; and, in fact, at the public hearing

before mentioned, the gentleman who very ably represented the views of those opposed to the suggested extension of suffrage conceded that the new electors, if the measure he deprecated were adopted, would be no less worthy of their trust than are the old.

The Committee therefore conclude that one graduated from any one of the four professional schools named, since its curriculum has been extended and its standard raised, is as well qualified as an alumnus of the College to vote for Overseers, and that, if he hold in addition an A.B. degree from some other college, this is, at least, no disqualification.

A second objection advanced to the proposed innovation is that, as a result of granting the franchise to graduates of the professional schools, a greater number of those specially interested in these schools would be chosen Overseers, and the Board might be led to interfere more frequently and minutely in their management. It is earnestly contended that professional schools can be better managed if their faculties are left untrammelled by a vexatious supervision, and that those at Harvard owe their present prosperity and merit in great part to the fortunate indifference of this Board to their interests, as the thirteen colonies are said to have prospered because of the Crown's neglect. Curiously enough, the same supposed indifference affords the other side a reason for making the change. Advocates of the extension claimed at the hearing that only when alumni of the professional schools, as such, were entitled to take part in their choice would the Overseers take a proper interest in, and feel a legitimate responsibility for, their good government and welfare. The Committee express no opinion as to the justice of either view: they think both are founded upon a misconception of fact. They see no reason to believe that the Board of Overseers has been or is remiss in discharging its undoubted duty to exercise a proper supervision over the professional schools. No less than eleven of its standing committees are devoted exclusively to the interests of those schools, and the provinces of eight more concern the students of one or more of them equally with those of the College proper. The greater age of professional students, and the fact that so many among them have already had a college training, may render the control of the Overseers over these departments of the University less paternal than in the case of the When, however, we consider how many of the present

Board of Overseers and their predecessors are or have been alumni of the several professioal schools, it would be very strange if they had less than their just share of its care and thought; and the Committee are satisfied that such is not the fact. If it is undesirable that the Board should occupy itself with the affairs of the schools, the remedy would seem to be in a change of its legal duties. A body which reigned, and did not govern, would be an anomaly in the polity of an American university.

Another argument urged against the extension of the suffrage is that alumni of the professional schools would vote for and cause the choice of Overseers pledged, or, at least, reasonably expected, to support measures of advantage to these schools, but injurious to the College proper. As an example, it was suggested at the hearing that a three years' course of study in the undergraduate department would be advantageous to the Law and Medical Schools, by increasing the number of those among their students who first took the A.B. degree. The Committee deem it no part of their duty to consider whether any abridgment of the college course is possible or desirable. They believe, however, that in deciding this question, and, indeed, in deciding any question, the interests of all branches of the University should be fairly considered, and they are the better satisfied with this conclusion because they entertain a confident belief that no one department of instruction can have real interests hostile to the real interests of others; and, independently of this consideration, they regard as altogether fanciful the fear that so small an addition to the existing electorate as would be made by this measure could materially affect the composition of the Board of Overseers or appreciably modify its policy.

Indeed, the only question as to which the Committee entertain any doubt is whether a benefit could result from the desired change sufficient to outweigh the certain, if not very serious, increase of labor and expense in the work of the Alumni Association, and the time and trouble needed to obtain the necessary legislation. The compensating advantage, if it exist, must be found, they believe, not in any improvement in the composition or work of the Board of Overseers, but in a satisfaction afforded to the alumni of the professional schools, and an increased concern and affection for the University on their part. Whether these effects would in fact flow from their participation in the suffrage must be ex necessitate a matter of opinion. At the hearing the gentlemen who assumed

to represent them were carefully interrogated as to the existence of an earnest and wide-spread desire on their part to possess the privilege, and unanimously and emphatically asserted that they all regarded their disfranchisement as unjust and humiliating. If, in fact, they do generally desire the suffrage, it is of very subordinate importance that others, including the Committee, may think they ought not to desire it.

The fact of the wish justifies an attempt to gratify it, at least to the extent of throwing upon those who object the burden of proof. In the judgment of the Committee this burden has not been sustained.

The Committee, however, think that the Overseers in any action which they may take on this subject should adhere to the principle that a qualification accepted for any purpose as equivalent to the A.B. degree should be a real equivalent. They do not, therefore, feel justified in recommending that all alumni of all departments of the University should be at once admitted to vote. While recognizing that any discrimination will be invidious, and must, in greater measure or less, diminish the pleasure and consequently the advantage they expect the extension to cause, they yet think that, in this instance, a line must be drawn somewhere, arbitrary and ungracious as the limitation may seem; and they know no better test to adopt than the one recommended by the last Committee appointed to consider the subject. Thus qualified, the measure proposed seems to them prudent, equitable, and calculated to promote the welfare of the University.

The Committee respectfully recommend the adoption of the resolution hereunto subjoined, and that they be finally discharged.

Very respectfully submitted on behalf of the Committee,

CHARLES J. BONAPARTE, Chairman.

Resolved, that, in the opinion of the Board, alumni of the Law, Lawrence Scientific, Divinity, and Medical Schools who obtain their degrees after a prescribed course of three or four years' study, and the satisfactory passage of full examinations therein, are qualified, in the interest of the University, to vote for Overseers, and the suffrage ought to be extended to such among them as were thus qualified at the date of their graduation, upon the same terms and conditions as to Bachelors of Arts; and that the Committee on Elections be and it is hereby authorized and

directed to take such action on behalf of the Board as may be, in its judgment, necessary or advisable to secure them this privilege without delay.

IN BOARD OF OVERSEERS OF HARVARD COLLEGE,
April 12, 1892.

Presented and ordered to be printed, with a minority report, if one shall be made, and the consideration of the same assigned to the next meeting of the Board.

Attest: ALEXANDER McKenzie, Secretary.

When put to vote in a small meeting of the Board of Overseers, the recommendation was rejected by an adverse vote of eleven to eight. Those in the negative were the Treasurer, and Messrs. Hoar, Russell, Green, C. F. Adams, Wetmore, Torrey, Sprague, G. O. Shattuck, Lee, and Story. Those in the affirmative were the President, and Messrs. Peabody, Hemenway, Wolcott, Bonaparte, Folsom, Williams, and Lyman. Last year the vote stood fifteen to nine, so that the slight gain in favor of the concession would be encouraging, were it not multiplied by the diminished total vote. A majority of the representatives of the alumni have thus again put themselves on record as unable to appreciate that our Alma Mater has ceased to be an academic department with affiliated professional schools, and cannot yet take its rank as a university, although assuming the title, owing in a measure to their obstructive action.

This report discusses the question in a very dispassionate manner, demonstrating conclusively the absurdity of many of the arguments of those who op-

pose the change. It does not, however, seem to me to show that its authors grasp the real significance of the movement. We want the government of the University to grant this extension of the suffrage to the professional alumni, partly as an act of justice, and partly as an indication that they comprehend the fact that the methods of governing a college are not applicable to the government of a university; that Harvard College is developing into Harvard University, as most of the early universities of the world - those of Naples, Bologna, and Paris, for example - developed from a single department by the addition of They fail to recognize that in the early universities the same unwillingness existed to allow a participation in the government to the graduates of the professional schools until the movement became irresistible. In all these universities the Faculty of Arts early came to be recognized as subordinate to the others. In the University of Paris, for instance, as early as the thirteenth century the three Faculties of Theology (Sacra Facultas), of Law (Consultissima Facultas), of Medicine (Saluberrima Facultas), were denominated Superior Faculties, because, in order to be admitted to them, it was necessary to have already received the degree of the Faculty of Arts (Subtilissima Facultas). The same subordination of the academic department is sure to come about in this country when our educational system shall have crystallized into its permanent form. Let us remember what James Russell Lowell said to us at the two hundred and fiftieth anniversary of the college, in 1886,—
"But we still occupy the position of a German gymnasium." And again: "I am speaking of the college as it has always existed, and still exists. In so far as it may be driven to put on the forms of a university,—I do not mean the four faculties merely, but in the modern sense,—we shall naturally find ourselves compelled to assume the method with the function."

I have said that in the early universities the degree in arts was a prerequisite for admission to the other faculties. This is not the case with us, although its desirability is not questioned. The last report of the Dean of the Harvard Medical School contains a table showing that since 1884 the proportion of students entering the School who are graduates either of colleges or scientific schools has steadily declined until now they represent only 28.2 per cent., a little more than half the ratio of the year 1884, when it stood the highest, 53.9 per cent.

As the prestige of our School was never higher than now, we cannot infer from these facts that college graduates are drawn away from the Harvard Medical School by the superior attractions of other schools. The reason we believe to be chiefly the fact that the requirement for the A.B. has been so raised as to make the age at which it can be acquired so late as to deter aspirants for professional degrees from seeking the A.B. degree first. If this interpretation of the

facts be correct, the College is suffering more than we are by its policy.

This is a most glaring instance of the folly of trying to govern a university with a single eye to the interests of one department, and that the one which should be the feeder of all the others. This might truly be called, in phrase of medical terminology, a boomerangoid policy. While this is the most important reason for our seeking to have the suffrage in the election of Overseers extended to the alumni of all the departments of the University, I wish to call your attention to two instances of definite injustice under which the Medical School is suffering under the present government. In 1772 Dr. Ezekiel Hersey, of Hingham, gave the sum of \$1,000, the interest of which was to be appropriated to the support of a professor of anatomy and physic. In 1790 the widow of Dr. Hersey bequeathed the sum of \$3,353.59 to the support of the same professor. In 1794 and 1795 Dr. Abner Hersey, of Barnstable, bequeathed £500 "for the encouragement and support of a professor of physic and surgery." In 1792 a legacy for £400 was left the College by John Cuming of Concord, the income of which was for the "Professor of Physic." In 1812 Esther Sprague gave \$2,000 "toward the support of the Professor of the Theory and Practice of Physic." It is admitted that these funds were given "to promote medical education as a matter of distinctive professional training." How do you suppose the income of these funds issued? Two-fifths is allotted toward paying the salary of the Hersey Professor of the Theory and Practice of Physic in the Medical School, while the other three-fifths goes to pay the salary of a professor in the Museum of Zoölogy, who gives no instruction "to promote medical education." The Medical School has repeatedly made a claim for the use of the whole income of these funds to the Corporation, invariably without success.

Secondly.—You all know that the University Library has large funds for the purchase of books for the use of the professors and students; that books are purchased on demand of the professors, and sent to the different laboratories and departments for immediate use, and are recalled to the central library as soon as their immediate usefulness has passed. The claims of the Medical School to participate in this privilege have been persistently ignored.

With such instances of injustice, narrowness, and partisanship, it behooves all the professional schools to unite in making the extension of the suffrage in the election of Overseers the chief qualification of candidates for that Board. Let the governing bodies remember the old couplet when they are claiming the title of University:—

"To have and not to use the same Is not their glory, but their shame." Several changes in the Faculty merit special comment. On May 15, 1893, Dr. David W. Cheever resigned the Professorship of Surgery. He was appointed Demonstrator of Anatomy in 1861, was promoted to be Adjunct Professor of Clinical Surgery in 1868, Professor of Clinical Surgery in 1875, and Professor of Surgery in 1882. Professor Cheever's retirement from the School after thirty-two years of service is a serious loss to the School. Most of you will recall, as I do, his lectures as models of conciseness, comprehensiveness, and clear exposition. You will, I am sure, join with me in wishing him many years of usefulness and vigor in practising what he has so well preached. [Applause.]

Another resignation of recent date needs but to be mentioned to be regretted. Dr. W. H. Howell, whose fame for thorough original work was such as to cause him to be summoned to the chair of Adjunct Professor of Physiology a year ago, leaves us to become the Professor of Biology in the Johns Hopkins University in Baltimore.

Dr. John Collins Warren is promoted to be Professor of Surgery, Dr. Thomas M. Rotch to be Professor of the Diseases of Children, Dr. James Jackson Putnam to be Professor of the Diseases of the Nervous System, Dr. A. L. Mason, Associate Professor of Clinical Medicine.

A gift from Miss Lucy Ellis of \$2,000 annually for five years to the Departments of Physiology and

Pathology has been announced. By the will of the late Dr. O. W. Doe, a \$100 scholarship has been established.

I hardly need to tell you that this Association has enjoyed another year of usefulness and self-laudation. The course of five lectures on Therapeutics by Professor H. C. Wood, of Philadelphia, which it provided for the students of the School, was attended by so great crowds that there was scarcely standing room in the hall. The extra number of our Bulletin which was distributed gratuitously to our fellows has been so vociferously applauded that we may be encouraged to give you others in the future. We spent about all our income for the year, and from the recent harvest have received so abundantly that the Treasurer tells me that on June 15 he had \$1,304.48 on hand. We have 1,107 fellows on the roll.

Our first business is to hear the report on the condition of the Medical School from the Committee of the Council, consisting of Dr. L. R. Stone, Dr. Samuel W. Langmaid, and Dr. W. Sturgis Bigelow. Dr. Stone is Chairman, and will read the report.

REPORT OF THE COMMITTEE ON THE HARVARD MEDICAL SCHOOL.

The year that has just closed has not been marked by any striking feature. The hope, the promise, of the sure success of the new four years' course held out in the report of the Committee of last year, has been fully realized, is an assured fact. Many of the alumni of the School undoubtedly felt that the dismal fore-

boding of the distinguished Provost of the University of Pennsylvania was more likely to prove true than the sanguine hopes of the Committee.

The entering class of 1892 had one hundred and fifty-three new matriculants, the largest class since 1872, with the exception of 1891, which was very large, caused it was thought by the fact that many came in that year to avail themselves of the last year of the three years' course. This class numbered one hundred and fifty-eight new matriculants, only five more than 1892.

The number of those with the degree of A.B., or some similar academic degree, has fallen in this year's class to 28.2 per cent. as against 53.9 per cent. in 1884. This percentage has fallen steadily from that year. In the College of Physicians and Surgeons of New York, on the other hand, the percentage of those with academic degrees has increased slightly, though perhaps this increase may be due to the decrease in the number of new matriculants. (These figures are taken from the Report of the Dean of the Medical School to the President of the University.)

The increase in the number of students is certainly a great cause of encouragement both to the Faculty and the friends and alumni of the School. It will give them courage for the next step which they will have soon to take, the requirement of the degree of A.B. or its equivalent before admission to the Medical School. The Law School has already made such a requirement, to take effect at the close of the year 1895-96.

Even now, as was said in last year's report, the entrance examination should be made more strict, and at least equal to that for admission to the Freshman Class of Harvard.

In connection with this matter of having only those with an academic degree enter the Medical School, your Committee cannot but feel that the time required to secure the degree of A.B. might be shortened, and some of the work in the last year at college might be in line with and count in the work of the Medical School. Or, if that is not allowed, why should not a degree be conferred if the student can, after a proper residence in college, pass the required examination, and thus secure his A.B. in three years or less, and at the end of his four years in the Medical School, if he can secure his cum laude in his examination, take his A.M. and his M.D. at the same time? It does seem as if those students who intend to continue their studies, and to enter the

profession of Medicine, Law, or Divinity, should not be compelled to spend so much more time, and to wait four years for a degree that they might secure in three. For time to them is more important, to say nothing of money, than to those who intend to go into business or devote themselves to a life of leisure after finishing their undergraduate life.

There have been some changes in the Faculty, notably the resignations of Professors Knight and Cheever. The resignation of Dr. Cheever calls for more than the mere mention of this fact. He has been connected with the School since 1861, first as Demonstrator of Anatomy, in 1868 Adjunct Professor of Clinical Surgery, in 1875 Professor of Clinical Surgery, and Professor of Surgery since 1882. The ability, the thoroughness, the conscientiousness, of his work, are too well known to all to require further comment. He has given additional honor to a chair already distinguished by a Warren and a Bigelow. He has well earned his title of "Emeritus." May he live long to enjoy it!

Of the work of the School in its different departments there is not much to be said, certainly nothing in the way of criticism.

In anatomy there has been an ample supply of material for dissecting; and in the lecture-room, to illustrate the bones, models made of paper pulp, of remarkable accuracy and lightness, are used. This collection embraces upwards of twenty models, representing all the principal bones of the body, enlarged from three to six diameters; and in addition, quite recently, a model of the base of the skull and face, enlarged six times, has been furnished. This collection supplies to the anatomical department almost unrivalled facilities for teaching osteology in a large lecture-room. In the dissecting-room, too, there are marked evidences of activity and progress. The work of the student is carefully noted, and he is encouraged to make careful observations and to note all anomalies in anatomical structures and relations; and his discoveries are preserved and become part of the anatomical history which is being made.

In histology and embryology, in chemistry, pathology, and bacteriology, the same activity is seen,— earnest and active work on every side, and the capacity of the different laboratories stretched nearly to their uttermost.

In physiology Associate Professor Howell, on whose appointment only a year ago the Committee on the Medical School were

congratulating the Association, and whom the School is now to lose by his call to the Chair of Biology at Johns Hopkins, has conducted some experiments in advanced work in the physiological laboratory which seem to be of sufficient interest to speak of at some length, especially as he has finished his duties here. One series of experiments had for its object the determination of the relation of the calcium salts to physiological irritability. The experiments were made in part upon the heart (cold-blooded animals). and in part upon nerve fibres and voluntary muscle. With regard to the former it was found that a heart supplied with blood from which the calcium salts had been removed by precipitation was entirely unable to beat. The blood circulating through the heart in this case had the normal amount of proteids. If a small proportion of calcium chloride solution was added to the blood, the heart immediately began to beat with normal vigor. On the other hand, it has been shown that a heart fed upon an inorganic diet, calcium salts, plus a certain proportion of potassium and sodium salts, will beat as well as though supplied with blood for many (at least thirty) hours. The general conclusion is that calcium salts are necessary in some way for the development of the internal stimuli which cause the heart-beats. With reference to nerve fibres and voluntary muscle it was likewise found that the presence of calcium salts is necessary for functional activity. A muscle deprived of calcium will, however, go into rigor mortis, thus tending to disprove the theory that this latter phenomenon is essentially similar to a muscular contraction.

A second series of experiments was made to test the validity of a recent theory of blood coagulation. The theory assumes that the fibrin of the clot is essentially an insoluble compound of calcium with one of the proteids of the blood. The object of the experiments was to determine whether fibrin formed under various conditions contains always the same proportion of calcium. It was discovered that the proportion of calcium may vary within wide limits, thus indicating that the theory above stated is incorrect, although the presence of calcium or of strontium or magnesium salts is necessary to the formation of the clot.

In a third series of experiments a careful study was made of the effect of cold and heat upon the different varieties of nerve fibres found in the body, with especial reference to the degree of heat or cold at which the conductivity of a nerve may be suspended without permanent injury to it. It was found that nerve fibres of different physiological activities, though contained in the same nerve trunk, reacted quite differently in this regard. The work gives promise of developing a new method of isolating the different physiological varieties of nerve fibres, especially those contained in the sensory trunks.

In a fourth series an effort was made to learn something of the degeneration and the regeneration of vaso-motor and sweat fibres in cases of section and suture of nerve trunks to the limbs. The sciatic nerve of a cat was chosen for experiment. The work is not completed. As far as it has gone, it indicates that in regeneration of nerve trunks the motor and sensory fibres regain functional activity before the vaso-motor and sweat fibres, the latter belonging to the class of non-medullated fibres. No previous work seems to have been done upon this point.

Your Committee, while acknowledging that the work of the School is so good, that the teaching of the theory and practice of medicine and the clinical instruction is of the best, still feel that it may be open to question whether there could not be more use made of the great abundance of clinical material offered by the Boston Dispensary and private dispensaries and hospitals. patients' rooms of the Massachusetts General Hospital and City Hospital, and the Boston Dispensary, show about one hundred thousand out-patients a year; and in the wards over ten thousand are treated, not including in this estimate the Eye and Ear Infirmary, the Carney, nor other small or special hospitals. course, both medical and surgical cases are included in these figures. All of the upper classes have opportunity to act as assistants to the house officers or the surgeons or physicians to out-patients, and are instructed in the surgical rooms in bandaging and minor surgery. In the medical cases diagnosis and treatment are taught, but of course in a more or less hasty way, a "snap" diagnosis often being all that there is time for. The cases, too, are generally chronic, often dyspeptic. Of course, in addition to this comes the work done under the eye of the different professors or the clinical teachers in the wards and in the lecture-rooms.

Without in any way attempting to disparage the value and importance of this teaching,—on the contrary, sure of its usefulness and necessity,—they cannot but feel that there is room for more and better work where the student is thrown upon his own re-

sources, under the general direction of some physician. It seems to your Committee possible to have students from the third and fourth classes take charge of a certain number of patients, who otherwise would be treated by the district dispensary physicians. They might be directed to call in such physicians in cases of emergency, and report to him all the facts of the case. What an advantage to the student to see the early stages of disease, to make his diagnosis, and direct the treatment of some acute case upon his own responsibility! Why not have this a compulsory part of his work (as in the obstetrical department, where he is compelled to have attended at least six cases of confinement), and to submit a full report of each case he has had the care of, diagnosis, treatment, and temperature chart, to the clinical instructor or the class?

But it hardly seems necessary to enlarge upon the subject: to state it is enough to commend its immediate adoption. That there may be difficulties is possible, but they can undoubtedly be overcome. On the part of the patient it does not seem as if there would be any objection. If there is no trouble in finding women who are thankful to trust themselves to the care of a student while in labor, it does not seem possible that they would refuse similar service while they or some of their families are sick with measles, pneumonia, diarrhæa, or consumption. With this, or something like this, added to the present methods of instruction, the Harvard Medical School will give to its students an education that combines to a degree not yet attained in other medical schools the best theory with the practice of medicine.

The course of six lectures by Professor H. C. Wood, of Philadelphia, provided by this Association, excited a good deal of interest, and were well attended. By his graphic style he held closely the attention of his audience while speaking simply of the dry details of certain well-known articles of the Materia Medica. It would be wise, undoubtedly, to have a similar course another year on some special subject of medicine or surgery.

The suggestion in last year's report on the Harvard Medical School of giving additional importance to the department of Materia Medica and Therapeutics, including with it Hygiene in its broadest sense, and having at its head a man of "broad culture" and sound experience, meets with our hearty approval. To secure such a man, the School needs money,—it needs money, too, in all the other departments,—endowments large enough to enable

the School to have the best men to be found, and to pay them salaries that will enable them to live without having to do outside work, which, of course, in many cases hinders them from doing the best they can in their special line of work. Then, too, with the growth of the School, with the new demands for biological, bacteriological, and physiological laboratories, the expenses of the School increase in a much greater ratio than its resources.

It is a cause for regret that the graduates of the Medical School, as well as those of the Law and Divinity Schools, are still denied a voice, or vote rather, in saying who should govern them.

LINCOLN R. STONE. S. W. LANGMAID.

The President.—Baglivi, in the seventeenth century, applied the Baconian apologue of the ant, the spider, and the bee to the various kinds of doctors. "The ant, who gathers food at random, and uses it immediately, is the type of the empiric, who goes hither and thither collecting facts, and applies them at once, untested either by the touchstone of experience or the crucible of reason. The spider, who spins her web out of herself, represents the theorizing doctors, the pure dialecticians of science. The bee does better than either, for she gathers the crude honey from the flowers, introduces it into her own organism, and there brings it to all the perfection of which it is capable; but, if you look for physicians that act like her, you will find none." If Baglivi were with us to-day, he would hear every one of us raise his voice in the assertion that we certainly had found one that belonged in the last class in the author of "Medical Diagnosis" [applause], Dr. J. M. Da Costa, Professor Emeritus of the Theory of Medicine in the Jefferson Medical College of Philadelphia, whom I now have the pleasure of presenting to you. [Great applause.]

RESPONSE OF DR. J. M. DA COSTA.

Mr. President,— When I last had the pleasure of sitting next to you at dinner, I observed that there was at times a little nervousness in your manner. I

did not quite understand what was disturbing your equanimity until you were called upon for a speech. However it be, my feelings of self-congratulation that I was not to be other than a listener did not remain unalloyed; for, with your usual persuasiveness and earnestness, I found myself by the end of the entertainment pledged to address this meeting to-day. Yet let me thank you for having done so; for it gives me a pleasure which, indeed, is great. But I cannot thank you for the subject you allotted to me, Medical Education; for if there be a subject which has been talked over again and again, if there be a subject which, wherever broached, calls to its feet the old and the young, if there be a subject that is sure to arouse antagonism, it is the subject of medical education. I have often asked myself why it is that medical education is so discussed by the profession, why this neverceasing upheaval. We do not see the education in law, we do not see the education in theology, a matter of constant dispute and agitation. And I have concluded that the keen interest, the deep feeling, which it engenders, is really due to the state of medicine it-The agitation is but a sign of the unrest in medicine we see everywhere. It is but a recognition of the spirit of research and investigation that is so conspicuous now, of the enthusiasm that is constantly adding new facts, almost new sciences. Medical education must be discussed, must be recast, since the groundwork on which medicine stands is being from

day to day enlarged and strengthened. Let us be, therefore, after all, glad that the subject attracts so much attention. It attracts attention because medicine itself is a most progressive science.

We cannot congratulate ourselves on the state of medical education as it existed in this country some years since. There were, as there are now, many earnest and eloquent teachers; but the wretched system of going over the same ground year by year, the total inadequacy of the time allowed for preparation, the utter lack of laboratory and hospital facilities, made the condition of medical education a reproach instead of a subject of honest pride. Now it is becoming vastly different. There is, indeed, no selfrespecting medical school which can stand the pressure of public opinion and go on in the forefatherly ways. The sacrifices, the struggles, of Harvard and of those great schools that stood by her side in honest rivalry, schools that appreciated the inherited wants of the past and the needs of the present, have not been in vain. They have done what the profession of medicine wanted them to do, and have done it splendidly.

The chief difficulty in making a high standard universal lies in the number of the medical colleges. It is, indeed, a sorry admission that the medical schools in this country are the greatest enemy to medical progress, not in themselves, but in their number. Some years ago there were nearly three hundred.

Now there are not far from one hundred and fifty; and they are dying at about the rate of three a year, without, it must be said, many mourners. A further reduction would be a national benefit. The reason they constitute in their number a bar to medical education is not only that in their struggle for existence the feebler ones tend to keep the general standard down, but that it is utterly impossible that all can keep pace with the requirements of modern medicine. How can all have well-equipped laboratories? Where can the clinical work be done on which the medicine of the day depends? The remedy lies in their amalgamation. Let the absurdity cease of small towns having three, four, six, of these struggling institutions, no one of which can have a vigorous life. The remedy also lies in the profession,—in the stand taken by potent representative bodies and their authoritative action, in public opinion discountenancing the establishment of medical schools except where the development of the country proves them to be imperatively needed in fresh growing centres. Thus in time the preposterous disproportion of medical schools as compared with schools of law, of divinity, of engineering, will cease; and it will come to be recognized that there is nothing about medicine that calls for such a profusion of teachers.

There is now all over the country a growing disposition for the universities to take charge of medical teaching, and to develop their medical departments with all the zeal they give to the others. We see it in Michigan, we see it in California and Colorado, we see it in Louisiana and in Texas, as strikingly as in our Eastern States. There is nothing but good in this. The power, the means, the spirit, of the university, go out to its branch. The university, in turn, gains by the reputation of its medical faculty, and by the recognition that medicine is an essential part of the new learning which leads on to the highest attainable civilization. Thus both are benefited. The future of medical education certainly lies in the universities, and in such great schools as can vie with them in clinical and other facilities.

But, as this state of things becomes more and more general and the weak colleges disappear, the university has increased obligations. It must encourage, it must satisfy, the legitimate ambition of those who wish to become teachers, and who prove their aptitude. Throw open the doors as widely as possible, grant the use of the lecture-rooms, attach men of rising prominence to the university, accustom them to look upon her as their true mother. You need not fear. You will not have too many. Students are keen critics. It will be a survival of the fittest at the end.

You have in this great School adopted a four years' course. I observed a rivalry here between you, Mr. President, and you, Mr. Chairman of the Committee on the Medical School, who should be the one to

announce its success to this Association. I am sure that there is not a member present who would not like to be in either of your places, and make this announcement; for it is one of great gratification to every member of Harvard, to every member of the whole profession in the United States. I am equally sure that, should the time come when Harvard calls for a fifth year, its loyal alumni would at once re-Do not, however, understand me as thinking this necessary or even desirable. I believe that for the present you have done enough, and that the curriculum is sufficiently extended. I hope to see the advance in medicine, or rather, I should say, in medical education, going on at the other end. I want to see trained minds enter on the study of medicine. is so much easier for a teacher to speak to and to instruct those who have had good mental training. is frightful to talk in an uphill manner to men fortunately, now a diminishing proportion in medical classes - who are unaccustomed to thinking, and who show in their faces that they have to labor to Therefore, I say again that it is to the beginnings that we must look. Let us have preliminary standards of sufficient kind, and the curriculum will, in process of time, and with growing subjects, and with the wealth of the country aiding, take care of itself.

It is gratifying to know that the medical colleges are, with almost unanimity, moving in the direction of

exacting certain educational requirements for matriculation. In the Report of 1891 of the Illinois State Board of Health it is stated that 129 colleges out of 148 in the United States and Canada have adopted some standard of general qualifications. It will soon be the universal rule. Even if the requirements are with many of the most shadowy kind, still they are They aim at securing mental training requirements. as a preliminary, and the whole means progress. The most desirable state of things would certainly be if, as a prerequisite to the study of medicine, a degree in arts or science be demanded. But the country is not ready for this. It would exclude many who are fully competent to study and to profit by their studies. All we can now ask for is proof of sufficient mental training, and it would be best if that proof were forthcoming from bodies unconnected with medical teaching.

But, if we are to get our students of medicine from the universities and colleges of the country, we must be sure that these give us help. Here I fear I am treading on ground which has been gone over thoroughly; but I wish to record at least my individual opinion that, if you want medicine in its higher branches to flourish, if you want it to flourish through university influence and university support, especially if the universities are to become the general medical educators, the university must meet you more than half-way. You must have not simply a shorter course of preliminary study at these universities,—and I am an advocate of the three years' course for the degree in arts and in science,—but you must also have them in every way giving facilities to those who are desirous of choosing medicine as a profession.

The assertion that the medical classes show a smaller proportion of college graduates than was formerly the case I know to be true. I have followed the matter for some years; and the reduction, I find, is general. The Dean of the Harvard Medical School states that in 1884 the per cent. of college graduates in the Medical Department at Harvard was 53.9, and that in 1892 it was 28.2. At Columbia it rose from peculiar causes to 34.7 in 1891, and was 32.5 in 1892. At the University of Pennsylvania, the Medical Department of which is solving the same problems as Harvard in the same spirit, the college graduates were, at the session of 1890-91, 152 out of 582, or 26 per cent.; in 1891-92, 167 out of 693, or 24 per cent.; in 1892-93, 168 out of 835, or 20 per In some of the medical departments of universities in which the proportion has not been very high there is much less difference to be noted. instance, in the well-known University of Michigan, in 1882-83, in a class of 378, 40 were college graduates, or 10.6 per cent.; in 1890-91, in a class of 369, 39, or 10.5 per cent.; in 1892-93, in a class of 370, 35, or 9.4 per cent. There are sixteen medical colleges, as I learn from a recent instructive paper by Dr. Bayard Holmes, in the Journal of the American Medical Association, with no student enrolled who had obtained a literary or a scientific degree.

Yet I am quite certain that, while the number who complete their academic studies is less, the general average of those of mental training is much higher, and the number much greater who have been for a year or two at some of the higher educational establishments, but have left without graduating. I made it a point for years, while actively connected with a medical school, to inquire into this matter, and kept records that were convincing. This is, I think, only an additional argument for the universities and colleges to consider. The age at which they graduate young men is certainly too high for the professions, especially that of medicine, which requires a long period of special study. It is, undoubtedly, the chief cause why the graduates of colleges are diminishing in the medical schools. Why should the age be so high? Why, here, in a young, rapidly developing country, where men want to, and mostly have to, get to work early, should we require this long preparation? I have taken some trouble to go over the reports of the universities of France and of Germany, and I am astonished to see the difference. who enter the professions, with their academic course completed, are, as a rule, nineteen years of age. work "On the German Universities for the Last Fifty Years," by Professor Conrad of Halle, he states that during a long term of years there were but 23 per cent., or, to speak accurately, 23.1 per cent. of men who were over twenty. We must attain the same here if we want to have college-bred men enter the professions. The colleges must recognize and take into account that professional work is itself a continuance of mental training and culture.

But this subject is too wide a one to follow further here. Let me return to the aims and results of medical education in this country. Vast good has been accomplished by the methods now gaining. educates those who are trained by it before they see their patients; formerly they educated themselves largely off their patients. I need scarcely say that I am heartily in sympathy with the advance that is going on,—the advance as to time required for the course, the advance as regards the subjects taught. But there are in all great movements periods of ebb and flow, of advance and retrogression. We are in risk of retrogression in trying to put too many subiects into the curriculum. The medical student cannot master them all. You cannot turn him out a finished article. The thing is impossible. Let him keep some of his angles. They will be worn off quickly enough when he gets into practice. Teach some subjects thoroughly, and let the rest alone. Treat him less as a school-boy, and more as a member of a university; develop in him the university idea. Allow him after the first year to choose for himself

much more than he is now permitted to, with full knowledge of the subjects required at the final examination. And there is another matter allied to this on which I feel strongly,—the constantly recurring examinations. I am utterly opposed to the everlasting examination of the poor medical student. Why cannot you take it for granted that he is developing? Why must you always pull him up by the roots, to satisfy yourself that he is growing? We all know that the knowledge of examinations and real knowledge, knowledge that from training and use has become part of the man, are not always the same thing; and, after all, you do not want to turn out medical prize oxen stuffed and fattened for examination, but medical men with thought, with power, with intelligence, and with love of work and of original investigation. Let us act on the belief that the medical graduate is a compound to be made by synthesis, not by analysis.

Mr. President and gentlemen,—A good deal has been said here, and well said, about the desirability of endowing universities. I am sure I sympathize deeply. I think that, if Dante is still at work on his "Inferno," he ought to add a chapter on the tortures that shall await rich men who do not give large sums to universities and colleges. But, after all, it is not simply by endowments that institutions flourish. It is also by appreciating the great teachers they have, doing them every honor, treasuring them. A great

teacher in medicine, as a great teacher in anything else, is rare. Hold him dear when you have got him. Show him every honor. Advance him. He is a potent influence in life: his memory is a power. Who goes to Paris without thinking of Laennec, Andral, Trousseau, and Nelaton? Who visits Vienna and does not have before him Rokitansky, Skoda, and Oppolzer? Who can go to Berlin and not think of Langenbeck and Frerichs; or to London and be unmindful of Hunter and Cooper and Bright? comes to Harvard and does not remember the Jacksons and Bowditch and Bigelow and Clark and Ellis and Storer and Shattuck and many others of fame? Their memories go to make up the School, and continue from generation to generation. In these memories they have left much behind them. Some have left also, from their very households, worthy successors; but all have left that great influence which, like the unseen subtle ether, goes to form the rays of light that illuminate a great university. I have made it a rule in these remarks not to speak of the living; but I must make one exception. In the list of those in whose memories Harvard is rich - I find myself speaking almost as if he had passed to another world, and bequeathed his immortal name—there is also Holmes. Who has struck a straighter, a keener, blow for medical rights, for honesty in the profession, and against shams than Holmes? He reminds me of one of those Eastern knights whose blade was so

skilful that it severed the head of an adversary or cut him down to the saddle, yet he would keep together until he was touched, when he fell asunder.

But I must not be tempted by the interest of the occasion and the kindly warmth of your reception to say more. As I look around me and see the earnest faces of those who are fighting together life's battle in the same cause; as I see side by side the veteran whose name is honored everywhere and the young man who is still to win his laurels, united in one desire, eager all for helpful aid and to promote useful endeavor,—it is not teacher and pupil I think of, but brother joined to brother, intent on upholding the beneficent influence, the traditions, the fame, of Harvard, and joyfully ranged around the glorious old banner that on its crimson folds shows victories in all science, literature, learning, progress.

The PRESIDENT.—I shall next administer to you the favorite remedy of Theodore Turquet de Mayerne, who was a famous physician in England in the seventeenth century, "Raspings of a Human Skull, Unburied," only I shall confine myself to the raspings from the inside of a particular skull, that of our eminent guest, who needs no introduction to insure him an enthusiastic greeting in this city and throughout the length and breadth of our country,— Dr. Abraham Jacobi, Professor of Children's Diseases in the College of Physicians and Surgeons, now the Medical Department of Columbia College in New York. [Great applause.]

RESPONSE OF DR. ABRAHAM JACOBI.

Mr. President and Gentlemen,—As long as it is the first object of your Association to advance the cause of medical education, and as you do not tire of seeing it printed at the head of the declaration of your principles, you will not weary to work for it, and will feel pleased with the assurance that fellow medical men from other parts of the country share your convictions, and have ever been ready to work for their realization. Perhaps it would be best to close right here with expressing my satisfaction at your successes. Indeed, when the names of the very foremost schools are called, and those who have been among the first to improve medical education, your Harvard will be prominently mentioned, together with Johns Hopkins, Ann Arbor, and, I am proud to say, my own Columbia. [Applause.]

But, while praising the schools for their zeal and success in that line, I must not forget to credit the profession at large with being the most persistent worker in the field of progress. Our very schools, with few exceptions, were the result of private enterprise,—an enterprise not always, originally, in the interest of individual self-aggrandizement, but often founded on the appreciation of the necessity of systematic teaching. Now, when finally the schools, or many of them, were slow in keeping up with the progress of science in teaching, it was again the

profession at large which insisted upon improved methods and the addition of new branches to the curriculum. New chairs were endowed by alumni, and the democratic spirit of the institutions of the country was often reflected in the unselfish and progressive action of the scientific masses. Again it was the profession at large, which year after year appealed to the legislatures of many of the States for the purpose of exacting State examinations after college graduation, and insisted upon a certain degree of preliminary education before matriculation. The persistent and self-sacrificing action of the profession is the more meritorious, the more it became known that many of the colleges, some of which were until then highly esteemed by the profession, were bitterly opposed to every movement in favor of raising the standard of matriculants, and of introducing improved methods of teaching or causing legislative enactments which demanded a State examination before the license to practice was to be given. There are on record the stories of some presidents and deans of medical colleges who, after a preliminary education of some kind had been made obligatory by a newly passed bill, applied clandestinely for its repeal. lege presidents and deans are expected to know their They know the affecting tale of the Roman woman who, after stabbing herself, handed, dying, the dagger to her hesitating husband, with the words, "Non dolet,"--" It does not hurt." Some of our medical educators on cash basis say of the money of the new matriculants,—fresh from the plough, the country store, the backwoods,—"Non olet,"—"It does not stink." [Laughter].

The colleges are not all like that. We know of some, at least, that have always worked together with the profession in the interest of progress. You will forgive me for always placing the profession foremost. Though I have been a college man almost all my professional life, and though so many of you are leaders and co-operators in a medical school, the democratic spirit of the republic of science makes me always feel proud of knowing that I am one of the file, marching to the same tune in the ranks, to reach a common aim, every fellow an officer himself. [Applause.]

There are some points on which all agree. A preliminary education is considered necessary as the basis of medical study, in behalf both of the student and of the welfare of his future patients. Still, the kind and amount of education required for matriculation are left uncertain. Harvard requires some Latin; other medical colleges, a common-school education, whatever that may mean [laughter]; some, none at all. Such was the case formerly in most of the schools. New York State has passed a law requiring a moderate, a very moderate, amount of general knowledge, without which a medical student must not be granted a medical diploma. Now, it appears to me reprehensible that any student should ever be permitted to pass a preliminary examination at any other time than before matriculation. If he cannot then pass it, he has not attained the lowest possible degree of mental culture and habit of application demanded in a medical student. [Applause.] Besides, his college years belong to his medical, not to his preparatory, studies.

All those who have the elevation of the medical profession, through improved medical education, at heart are also agreed upon lengthening the lecture courses, and an increase of the years of study; also, an extension of clinical instruction, not only as it is now, but in hospital wards, where the diseases are best studied, and in private practice among the poor, where, under competent guides, the necessities of a case are most easily learned, together with the means of doing the most possible good with the least possible facilities. Gradually, during decades of first tentative, afterwards systematic, attempts, clinical instruction has obtained its full recognition. I established the first American children's clinic in 1860, it was looked upon as an innovation. To-day there is hardly a medical college in the land but claims to teach diseases of children as a special study. You, here, have a full professorship, and it is worthily filled. [Applause.]

We have been told that medical education and its improvement is in part a money question, that it was so twenty years ago, when a three years' course was contemplated, and is still more so now that the question is one of four years. This innovation, so we are reminded, will break the backs of some of the best schools, and we must not handicap medical education too heavily. If that remark were meant not for education, but educators, self-appointed educators, educators depending on and looking for students' fees, it would be more correct. [Applause.] A hundred thousand public schools speak volumes for the average information of the people; but three hundred medical colleges do not, by their number, prove the satisfactory condition of medical education and a high standard. If a number of medical schools would disappear, no harm would be done to anybody but a few of their professors perhaps. [Laughter.] We have too many schools, too many doctors, too many students. There is a doctor for every four hundred or six hundred inhabitants of the country: we want more people, and can do with less doctors. [Great laughter and applause.] We can do with less doctors, provided the quality of both the people and the doctors will continue to improve. [Applause.]

We have also been told that the social habits of the nation require consideration, and the doctor must be at something like its level. Thirty years ago a doctor of my most intimate acquaintance was told he was "no Deutscher Arzt, "no German doctor," because he drank no beer. [Laughter.] It is said the

people do not want or demand well-educated doctors, with heads and hearts equally trained. So we must adapt medical education to their wishes. We need not be told,—we know that many popular clergymen and their wives and novel-writers and journalists, also our jurists, favor homœopathy, eclecticism, and run after Christian Science and clairvoyance,—you know they do. Please adapt your Harvard courses to the wants and demands of the superior intellects and the social habits of that "nation." [Laughter and applause.]

You are, when you consider the question of medical education, no longer advisers of the individual. We are, as a profession and a teaching body, responsible for the condition of things medical and hygienic which concern the State, the people at large, and mankind. We have no longer even to deal with the people of Boston or New York or Oshkosh, or any part of them. The most precious goods of mankind, of all classes, ages, sexes, are in our keeping. We are also responsible, all of us who teach, all of us who practise, to those who learn, to those who practise with us, and to those who will succeed us. The best of us is not too good for the present and future profession, and the best we can give is but what they have a right to demand. [Applause.]

"The social habits of the people." That would mean they must be served according to their own expectations, misguided by the accumulated ignorance of generations. [Laughter.] If it be suggested that the poor, the lonely farmer, the frontiersman, must be given up to an inferior practitioner, we have not sunk so low in our democratic country as to publicly proclaim the inferiority of certain classes, as they did in Germany, for instance. In Prussia they had a Wundarzt (surgeon) "of the first class," different from the second-class surgeon, whose functions consisted in pulling teeth, bleeding, and setting bones. This surgeon of the first class was permitted to practise medicine and surgery in all its branches, but only in such places where there was no physician, the place being too poor and forlorn to tempt a regular doctor. This Wundarzt passed his examinations after three years of study instead of four, and was admitted to the lectures without a classical education. Thus his inferiority was stamped on him officially; and, being classed inferior, he was permitted to practise on the lowly. In Bavaria it was still worse. Only those graduates who passed their examination with the highest honors were permitted to practise on the military or the jurists or the shop-keepers or the whitewashers in the capital of his sacred majesty, the The small towns and the farming villages had to be satisfied with the inferior doctor who had just escaped rejection. For them the medical rubbish was good enough. [Laughter.]

We are sometimes told that the population of the interior and our West is well enough off with that

class of doctors, the poorly equipped and the uncouth. That is explained by alleged necessities. It strikes me as a sort of medical lynch law. [Applause.]

The fourth year of medical instruction, as it is contemplated, is to be given up mainly to clinical teaching. Besides, there are some branches which may fitly be lectured upon for and studied by the advanced students, such as embryology, in its various relations, not only to malformations, but to diseases which depend on hereditary predisposition, persistence of embryonic conditions, and fætal diseases. very numerous. Another is the history of medicine, which thus far has been sadly neglected by us. While it amplifies our knowledge and reveals the evolution of medical science and of epidemics, it makes us modest. In the latter there is no harm; for, as a rule, it takes the average graduate, say, five, ten, twenty, or forty years of professional life to become so.

The third is legal medicine and medical jurisprudence, the very doctrine which, while drawing upon all the teachings of biological and medical sciences, connects us most intimately with the public at large, and with its individual and social crises and diseases. In all probability, special topics of hygiene would also be treated both in lectures and in the laboratory.

In the present condition, both of medicine and of society, these subjects cannot be missed; for the demands on the intellectual faculties, knowledge,

and services of the physician, are steadily growing. In the last century an erudite physician could at the same time be a learned philologist, or a medical professor would hold the chairs, for instance, of pathology and botany at the same time. was simpler then. The many component factors of modern medicine cannot possibly be gathered and conquered by a single brain. Still, improved teaching facilitates learning. In most things method is everything. I remember the time quite well when a medical professor would repeat year after year the reading in his lectures of his old manuscript. Now the so-called didactic lectures are giving way more and more to demonstrations and laboratory work. Besides, I firmly believe that all of our immediate successors will learn and think more quickly than I and others perhaps. To-day we adapt our thinking to our facility of reading or writing. In composing, we do not think, try not to think, faster than we can write. If we should all use stenography, we should become accustomed to accelerating our thinking. our books were printed stenographically, we should not be hampered and delayed by the slow pace of our reading. Thus much time would be spared, and the mental faculties increased. In that way the allaround doctor, who always was and always will be the philosopher and the statesman of the profession, will be able to cope with the difficulty of mastering, and bind into harmony, the overwhelming material furnished by special investigation.

Let me, after having made some remarks, disconnected and inexhaustive though they be, on medical education, add one on educators. I shall be very brief, not wishing to snub myself, and perhaps offending some who are not here. [Laughter.] Most of us here, I take it, are professors. [Laughter.] may be a few who are not yet, but cannot escape. New York we are all professors, nine out of ten; or, at least, we are instructors or clinicals, or we are cousins or friends of cousins of college deans, and therefore "in it." [Laughter.] We have to-day paid our respect to the student. He is to know something before he matriculates. He is to study medicine four years. He is even to pass a State examination (except in Massachusetts, where my Harvard friends and celebrities and the Russian pedler who hangs out his shingle are practitioners equally "chartered"). [Laughter.] We expect big laboratories and hospitals to be endowed by citizens or the State for teaching purposes. We insist that society shall hold itself responsible for the health of the people. Boards of health looking after the sources of maladies, many of us claim that the State is responsible for the mental equipment of the practitioner who has to cure disease. Where do the professors come in? How are they to be appointed under a system of improved medical education? There are many ways of becoming or appointing professors, some of which are as follows: Thirty years ago I was offered the place of

professor of diseases of children. I replied, I could not think of accepting, I did not know enough. My friend, who was a professor and knew all about it, laughed, and replied, if he were offered a chair of nautics, he would begin lecturing to-morrow. That is, gentlemen, how I became professor of pediatrics, only because there was no place vacant for a Colum-[Continued laughter.] Others, as I suggested, are cousins, friends, assistants in private practice. To be rich, well connected, and have relatives among hospital and college trustees is a very good mental equipment. [Laughter.] Have a friend who wealthy and endows a chair for you. In Germany, be a son-in-law of a leading professor. But lately I read of the death of a German Privatdocent, at the ripe age of seventy-four, whom I knew when he was already Privatdocent, but proved his incapacity for advancement by refusing to marry the daughter of the full chair. [Laughter.] Write a text-book while you are young and fresh. [Laughter.] There are so many that you can extract half a dozen, and make the seventh with the aid of very little brains and much more posteriora. Operate on two alleged lacerations daily, and let no more than fifty per cent. die of septicæmia. Prove that the best place for ovaries is in a jar. [Great laughter.] Render yourself a parody of the great Philadelphian, who makes a diagnosis before he cuts babies' skulls, by sawing without diag-The first is seen and heard and heard of: the

latter is not. On that line there are many fine possibilities. [Laughter.] There are not so many in others.

There are men who take things more seriously, at least differently. There are those who, after having been earnest students, bury themselves in a laboratory or the dissecting-room or the hospitals, intending to finish their education on the day of their They will now and then publish an article containing the fruit of their labors, without printing their address or their office hours at the bottom. [Laughter.] They may write a book, text-book, or monograph, when they are ready, after many years of toil and thought. They will be professors after they have made a reputation, not vice versa. there is a way they have in Paris, where professorships are awarded after a long, meritorious life or a searching competitive examination. Thus there are many ways of becoming a professor, and those who are bent upon improving medical education will do well never to cease their efforts and watchfulness in their selections.

Mr. President, I shall now close at last. My cursory remarks or suggestions have possibly been only repetitions. If I appeared to display some levity, I did not mean it. [Laughter.] For, indeed, I feel very serious always about questions concerning the elevation of my beloved profession and the safety of the commonwealth. Both are identical. In matters

of health and hygiene both depend on improved medical education and training. I might say, if I had time to discuss it, "medical and general education"; for the shortcomings of a one-sided technical or specific information, lacking general and broad culture, is perhaps best proven by the many people belonging to other professions who are taken in by medical sectarianism and downright quackery.

Why, now, do I insist upon a medical education which must appear, and must be, inaccessible to many? For the reason that the required public medical work can be done by a smaller number of men, and there is no ground for lowering the standard in behalf of those who must always be and remain inferior. For science must not be a milch cow. Medicine is no business: its practice is a vocation requiring ample brains and no narrow hearts. For the reason that in your classes of medical students you speak and teach above the heads of the less gifted, less prepared, and less industrious. The ideal standard of education must be measured by the capability of the best, not the worst. The perfectibility of the race, of science, and of the profession, and your own individual pride as teachers, go hand in hand. What appears impossible and Utopian to-day may not be so in ten years or in fifty. Everything changes rapidly. Your very poorest graduate is familiar with many subjects no Boerhaave, no Hunter, no Bichat, ever dreamed of; and in twenty-five years perhaps many

of you, and all of your sons, will smile at the feeble inroads of to-day into the knowledge of modern etiological factors and, we hope, of preventive and curative therapeutics, which, after all, is the aim and crowning glory of all medical science. [Applause.]

The President.—Roscoe Conkling, when addressing a dinner of the press in New York, said, "There are three classes of men entitled to use the pronoun we,—sovereigns, editors, and men with tape-worms." If Mr. Ernest Hart of London be here present, we may felicitate ourselves that he does not belong to the first category, we may felicitate him that he does not belong to the third, and invite him to address us as the eminent representative of the second category. (A telegram was then handed to the President.)

FORT WAYNE DEPOT, IND.

Deeply regret prevented coming. Letter follows. Please forward letters Cunard Company, New York, for Ernest Hart.

The President.—Our next guest, when Dean of the Lawrence Scientific School in Cambridge, increased the attendance of students from 14 to nearly 100 in the five years of his tenure of office. The fame of his achievement went abroad throughout the land, and caused him to be summoned, two years ago, to take the vacant chancellorship of the Washington University in St. Louis. His skill with figures is such, as demonstrated in the Lawrence Scientific School, that I think he must have had gratified the wish expressed by the little girl who, working over her school arithmetic beside her father one evening, suddenly looked up and said, "Papa, I wish I was an Australian rabbit." The father, filled with surprise and perplexity, asked, "Why do you wish to be an Australian rabbit?" "Because they multiply so rapidly," was the I have pleasure in presenting to you Professor W. S. Chaplin, Chancellor of the Washington University, who can tell you much of interest that he has learned about Medical Education in the West. [Applause.]

PROFESSOR W. S. CHAPLIN.

Mr. President and Gentlemen. I have noticed that I am the only patient present at this meeting, and I have wondered why I should be here. But, considering the matter somewhat carefully, it has occurred to me that it was very proper that St. Louis should have a representative on this occasion, as St. Louis has the very proud distinction of being the city in this Union which has the greatest number of medical schools. [Laughter.] It now delights in eleven. [Laughter.] It has had many more, which have died on the way, and the number eleven survives. I have examined with a good deal of care to ascertain why medical schools in the West should multiply,-for all over the West there is this tendency to multiplication, —and it seems to me to come from several reasons. the principal of which are, first, the fact that the people do not understand what science, education, culture, such words as those, mean. When we can get them to understand that science means something. and give them an idea, more or less definite, of what it means, then we shall get them to study science.

There is another reason which I mention with the greatest diffidence here; but it seems to me that the etiquette of the medical profession has drawn the lines in one respect, perhaps, too closely. If a physician starts with the determination—and it seems to me a great many have this determination—to make him-

self a specialist, how shall he ever make it known? If he puts it on his card or on his sign, he at once drops from the ranks of regular practitioners. only way left to him to announce his specialty is to get himself put down as professor of that specialty in a medical school. Don't think for a minute that these many medical schools in the West have been established for purely pecuniary reasons. The doctors do not make enough out of them, certainly, to pay for the work which they put on to them. They might make more money, probably, by sawing wood the same amount of time. They do it in order to establish themselves as specialists. They have no other reason. Is this not a case where you have put on too much restriction in one direction?

And that has produced an abnormal growth in another direction. If you look into the history of these medical schools, you find that there was a time when there was but one medical school. Some fifty years back in St. Louis, I believe, there was just one. Then, by a process which the naturalists understand perfectly, by the growth of a kind of septum across the medical school, suddenly there were two medical schools equipped fully, and those two medical schools were running in the most violent opposition. Here, in the East, I understand, the medical profession have none of these differences and troubles; but in the West every medical school means a new set of mutual admirers. The professor of ophthalmology

sends all his cases of surgery to the surgeon who is connected with his medical school. Go into St. Louis to-day, and you find just eleven sets of men who generally recommend and send all their patients to the men connected with their own schools. I do not despair of medical education in the West. I hope that there will be constant and rapid deaths among the medical schools. The condition is certainly a very disgusting one, when viewed from the point of education.

Let me give you one or two of the brighter points of this whole picture. Some thirty years ago the faculty of one of these medical schools formed an organization, which was a hard and fast agreement, that they would turn over every dollar of profit to a fund, put it out of their control entirely, and devote that fund to furthering medical education. result of this, they have lately built what I think is one of the very best educational buildings I know of. It has large laboratories; it has splendid lecturerooms; it has every feature of the most modern methods of teaching. And that has been built and equipped out of the self-sacrifice of members of the medical profession. [Applause.] I believe it is a lone example of such self-sacrifice. I know of no other profession that can boast of such an example; nor do I know of any other school in the medical profession that can show it, either. I like to mention it here, because that building, exemplifying as it does

the latest ideas in medical education, is the work of a graduate of this school, Dr. John Green. [Applause.]

You, of course, will not expect me to discuss medical education. You will allow me to say, however, that the very best thing this school or any other medical school can do to advance medical education in the West is to advance as rapidly as they can In the West they catch ideas very themselves. quickly. If they see a thing done in the East, they are very likely to do it in the West. In our eleven medical schools we have representatives of all stages of medical education,—one-year courses, two-year courses, and three-year courses. I believe, Mr. President, as far as I can find out from studying books, that the old style two-course system of instruction,—that in which the student one year heard the lectures, and the next year heard the same lectures again,-which, I think, went out in the Harvard Medical School some twenty-three years ago, that, I believe, dates back to the medical school at Salerno in the year 1100 (I may be wrong about that; but, at any rate, in the school at Salerno a student was required to hear the same lecture twice, once to get his notes and the second time to see whether his notes were correct or not) [laughter],—that has been perpetuated, and there are examples of it still in the Then from that stage we go up to the three years' course, which was adopted in St. Louis a few

years ago, some three or four years ago. It was done simply to keep up with Eastern schools. Those schools will advance to a four years' course in a very short time. If you have a five years' course here, they will soon have one in the West. The four years' schools, if you care to look at the map, you will find are distributed along the Atlantic Coast. You will find another one again at Chicago. You will find, then, one on the Pacific Coast. Those are the four years' schools. From those four years' schools other four years' schools will follow.

I am sorry not to be able to contribute more to your meeting, Mr. President. I have to thank you most heartily for the opportunity to be here. [Applause.]

The President.—We stand adjourned, gentlemen, to next year.

LIST OF DEATHS

LIST OF DEATHS SINCE PUBLICATION OF THE CATALOGUE TO JUNE 27, 1893.

CARTER, CYRUS FAULKNER, M.D. 1887, Boston, Mass. Died in Boston June 14, 1893.
DEAN, EDGAR EVERETT, M.D. 1861, Brockton, Mass. Died in Brockton Jan. 7, 1893.
EASTMAN, EDMUND TUCKER, M.D. 1850, Boston, Mass. Died in Boston Nov. 7, 1892.
GILMARTIN, PETER PAUL, M.D. 1865, Detroit, Mich. Died in Detroit April 1, 1893.
Hodges, William Donnison, M.D. 1881, Boston, Mass. Died in Nahant March 2, 1893.
HOOPER, FRANKLIN HENRY, M.D. 1877, Boston, Mass. Died in Boston Nov. 22, 1892.
HUSE, RALPH CROSS, M.D. 1866, Georgetown, Mass. Died in Georgetown, Mass., June 2, 1892.
JARVIS, JOHN FURNESS, M.D. 1853, Boston, Mass. Died in Boston, Feb. 10, 1893.
McIntire, Harvey Graves, M.D. 1848, Concord, N.H. Died in Concord, N.H., May 2, 1892.
NELSON, SAMUEL NEWELL, M.D. 1882, Revere, Mass. Died in Revere Feb. 25, 1893.
OLIVER, FITCH EDWARD, M.D. 1843, Boston, Mass. Died in Boston Dec. 9, 1892.

82 HARVARD MEDICAL ALUMNI ASSOCIATION.

- PEASE, GILES MOSELEY, M.D. 1863, . . . San Francisco, Cal. Died in San Francisco Dec. 14, 1891.
- PELTON, CLARENCE WHITFIELD, M.D. 1890, . Worcester, Mass. Died in Worcester June 14, 1892.
- RUPPANER, ANTHONY, M.D. 1857, . . . New York, N.Y. Died in Concord, Mass., July 31, 1892.
- SHATTUCK, GEORGE CHEYNE, M.D. 1835, . . . Boston, Mass. Died in Boston March 22, 1893.
- SHAW, BENJAMIN SHURTLEFF, M.D. 1850, . . . Boston, Mass. Died in Boston May 2, 1893.
- SPRAGUE, RICHARD, M.D. 1887, Boston, Mass. Died in Boston June 28, 1892.
- STRONG, CHARLES PRATT, M.D. 1881, Boston, Mass. Died in Boston March 15, 1893.
- TERRY, CHARLES CHURCH, M.D. 1884, . . Fall River, Mass. Died in Fall River July 18, 1892.
- TOBEY, JAMES EDWIN, M.D. 1872, Central Falls, R.I. Died in Central Falls, R.I., July 28, 1891.
- Tower, Charles Carroll, M.D. 1859, . So. Weymouth, Mass. Died in So. Weymouth May 29, 1893.
- WHITTIER, SAMUEL CROOK, M.D. 1862, . . Portsmouth, N.H. Died in Portsmouth, N.H., Feb. 2, 1893.
- WILSON, JOHN HARPIN, M.D. 1881, Chicago, Ill. Died in Chicago Aug. 11, 1892.
- WARDWELL, WILLIAM TECUMSEH SHERMAN, M.D. 1888, Roslindale. Died in Roslindale June 24, 1893.
- WOODBURY, GEORGE FRANKLIN, M.D. 1882, . . . Worcester. Died in Worcester June 18, 1893.

EXTRACT FROM THE REPORT OF THE DEAN OF THE MEDICAL SCHOOL

EXTRACT FROM THE REPORT OF THE DEAN OF THE MEDICAL SCHOOL.

Students entering the Medical School are either graduates of colleges and scientific schools, holding degrees in letters or science, and, as such, admitted to the School without examination, or they are men who have not had the advantage of a collegiate education and whose fitness to enter upon the study of medicine is tested by an admission examination. An inquiry into the way in which the numerical proportions of these two classes of students have varied during the last twenty years is not without interest.

From the following table, which shows the total number of students and the percentage of graduates of colleges and scientific schools in the entering classes of the School, it appears that the ratio of college-bred men to the total number of the class increased largely, though irregularly, during the first portion of this period, reaching a maximum of 53.9 per cent. in 1884.

Year.	Total No.	Percent, of Graduates.	Year.	Total No.	Percent. of Graduates.	Year.	Total No.	Percent. of Graduates.
1872	44	34.1	1879	105	39.0	1886	94	46.8
1873	69	34-7	1880	64	48.4	1887	98	45.0
1874	109	29.3	1881	81	46.9	1888	103	38.8
1875	90	27.7	1882	78	46.1	1889	87	34-4
1876	111	29.7	1883	88	51.1	1890	134	38.0
1877	93	37.6	1884	102	53.9	1891	171	36.8
1878	103	39.8	1885	90	53-3	1892	174	28.2

Since that time there has been an equally marked diminution in the ratio, so that for the present year only 28.2 per cent. of our

first-year students are college-bred men, a ratio which is, with one exception, less than in any other year since 1872.

The cause of this relative diminution in the number of what must be regarded as the most desirable class of our students is doubtless a complicated one, but among the influences that have contributed to this result it is fair to assume that the increasing demands of our colleges upon the time of the undergraduates, and a growing conviction of the importance of beginning professional studies at an earlier age than that at which most students obtain the degree of A.B., have played an important part. This view derives confirmation from the fact that there is a large and apparently an increasing number of students in every entering class who have received a certain amount of collegiate education, but have left their colleges without taking a degree.

The following table shows how the number of this class of students has varied from year to year since 1874:—

Year.	No.	Year.	No.	Year.	No.
1874	10	1881	12	1888	8
1875	16	1882	8	1889	9
1876	16	1883	8	1890	26
1877	14	1884	11.	1891	28
1878	13	1885	11	1892	24
1879	11	1886	10		
188o	7	1887	11		

There are, of course, many reasons which induce students to leave college without taking a degree, and it is very unsafe to draw general conclusions from the variations in the total number; but the fact that this class of students has increased in such a striking manner during the past three years, taken in connection with the recent great falling off in the number of college graduates in our entering classes, certainly suggests the possibility that there is a growing class of students who have reached the conviction that the degree of A.B. may be too dearly purchased if it involves so much delay in entering upon a chosen profession. If this is the

case, it may be hoped that the wants of this class of students may be to some extent supplied, as far as Harvard University is concerned, by the course in Anatomy, Physiology, and Physical Training recently established in the Lawrence Scientific School; but it would perhaps be well for those who are responsible for our methods of university education to consider whether, in the effort to raise the standard of college education, the academic curriculum has not lost a good deal of its value as a preparation for a professional career, and whether it may not be desirable in the interests of a broad, liberal education to shorten the period of academic training to meet the wants of the professional schools, and to provide by a greater development of the graduate department for the highest kind of liberal training in as many different directions as possible. The A.B. degree would then become the mark not of a liberally educated man, but of one who has taken the first step in the direction of liberal training, the second step being the acquirement either of a professional degree or of that of A.M., Ph.D., or such other degree as may be adopted to indicate the completion of a course of liberal study in the graduate department.

An inquiry into the way in which the proportion of college-bred men has varied in other Medical Schools may perhaps be expected to throw light upon the causes of the sudden changes observed at Harvard. The College of Physicians and Surgeons of New York is the only large school in the country for which data are at hand for making a comparison of this sort with our own institution. Unfortunately, the figures obtained from the catalogues of this School lose something of their significance from the fact that the students are not classified, as at Harvard, according to years of study; but they are nevertheless presented as not without interest in the discussion of this question.

The following table shows the total number of students and percentage of those holding degrees in letters or science (A.B., B.A., A.M., B.S., S.B., S.D., Ph.D., and Ph.B.) in the successive sessions of the College of Physicians and Surgeons, New York, from 1872 to 1892:—

Year.	Total No.	Percent.	Year.	Total No.	Percent.
1872	359	16.7	1883	505	23.9
1873	387	16.5	1884	490	24.6
1874	452	17.9	1885	502	23.9
1875	411	21.4	1886	606	20.1
1876	439	22.7	1887	809	18.4
1877	413	20.8	1888	701	23.9
1878	485	22.8	1889	619	26.3
1879	513	21.2	1890	534	30.5
1880	555	19.6	1891	570	34.7
1881	547	21.9	1892	642	32.5
1882	543	21.5			

It will be seen by the table here given that between the years 1872 and 1887 the number of students having a collegiate education varied from 16.5 to 24.6. per cent. of the whole number of students, but that during the last four years the ratio has been much larger, rising in 1892 to 34.7 per cent. The fact that the ratio of college-bred men has been rising in the New York School, while it has been falling at Harvard, might suggest the conclusion that this class of students finds superior attractions in the former institution. There are, however, circumstances connected with the recent history of the New York School to which my attention has been kindly called by Dr. J. G. Curtis, and which serve to explain much of the recent rise in the percentage of college graduates. The year 1888 was the first year in which an entrance examination was required. This reduced the total number of matriculants from 800 to 701, but did not affect the college-bred men. Hence the percentage rose. 1890 was the first year in which the State of New York took charge of the entrance examination, applying it to all schools alike. The total matriculants again fell from 619 to 534. causing, as before, a relative increase in the college men. The increased percentage of the last two years is, however, associated

with an increased and not a diminished number of students, and is therefore a source of gratification.

Whatever may be the explanation of the fluctuations in the proportion of students having a collegiate education in the Medical Schools of the country, the phenomenon, in Harvard University at least, is sufficiently striking to attract the attention of all who are interested in methods of university education.



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